

Incident ID	nRM2030230289
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Robbie Runnels

Title: Environmental Representative

Signature: _____

Date: 3/22/21

email: rrunnels@mewbourne.com

Telephone: (575)393-5905

OCD Only

Received by: _____

Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____

Title: _____

Remediation Summary & Soil Closure Request

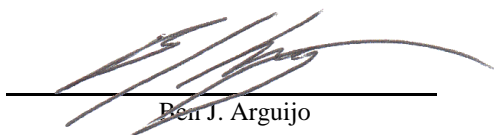
Mewbourne Oil Company Carlsbad Water Management System

Eddy County, New Mexico
Unit Letters F & K, Section 35, Township 23 South, Range 27 East
Latitude 32.261438 North, Longitude 104.163478 West
NMOCD Reference No. nRM2030230289

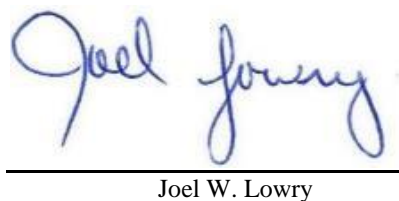
Prepared By:

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Lovington, New Mexico 88260



Ben J. Arguijo



Joel W. Lowry



Midland • San Antonio • Lubbock • Lovington • Lafayette

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1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Mewbourne Oil Company, has prepared this *Remediation Summary & Soil Closure Request* for the release site known as the Carlsbad Water Management System (henceforth, "Site"). Details of the release are summarized below:

Location of Release Source				
Latitude:	32.261438	Longitude:	-104.163478	
Provided GPS are in WGS84 format.				
Site Name: Carlsbad Water Management System		Site Type: Pipeline		
Date Release Discovered: 10/19/2020		API # (if applicable): N/A		

Unit Letter	Section	Township	Range	County
F & K	35	23S	27E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name _____)

Nature and Volume of Release

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 150	Volume Recovered (bbls) 20
	Is the concentration of dissolved chloride in the produced water > 10,000 mg/L?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released	Volume/Weight Recovered

Cause of Release:
 12" Poly pup joint split on pipeline riser.

Initial Response

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Release materials have been contained via the use of berms or dikes, absorbent pad, or other containment devices

☒ All free liquids and recoverable materials have been removed and managed appropriately.

Previously submitted portions of the NMOCD Form C-141 are available on the NMOCD Imaging System.

2.0 INITIAL SITE ASSESSMENT

On November 9, 2020, Etech conducted an initial site assessment. During the initial site assessment, a series of test trenches were advanced within the release margins in an effort to determine the vertical extent of impacted soil. In addition, hand-augered soil bores were advanced at the inferred edges of the affected area in an effort to determine the horizontal extent of impacted soil. During the advancement of the test trenches and hand-augered soil bores, soil samples were collected and field-screened for the presence of Volatile Organic Compounds utilizing a Photoionization Detector (PID) and/or concentrations of chloride utilizing a Hach Quantab ® chloride test kit. Based on field observations and field test data, 16 delineation soil samples (TT1 @ Surface, TT1 @ 11', TT2 @ Surface, TT2 @ 6', TT3 @ Surface, TT3 @ 6', TT4 @ Surface, TT4 @ 7', TT5 @ Surface, TT5 @ 3', SH1 @ 2.5', NH1 @ 2.5', EH1 @ 2.5', EH2 @ 2.5', WH1 @ 2.5', and WH2 @ 2.5') were submitted to a certified commercial laboratory for analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX); total petroleum hydrocarbons (TPH); and chloride.

Locations of the test trenches and hand-augered soil bores are depicted in Figure 3A, "Site & Sample Location Map - Delineation". Field data is provided in Appendix A. Soil chemistry table is summarized in Table 1. Laboratory analytical reports are provided in Appendix B. General photographs of the Site are provided in Appendix C.

3.0 SITE CHARACTERIZATION & CLOSURE CRITERIA

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) was conducted in an effort to determine the horizontal distance to known water sources within a half-mile radius of the Site. Probable groundwater depth was determined using data generated by numeric models based on available water well data and published information. Depth to groundwater information is provided in Appendix D.

What is the shallowest depth to groundwater beneath the area affected by the release?	95 feet	
Did the release impact groundwater or surface water?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of any occupied permanent residence, school, hospital, institution or church?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within the incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production or storage site?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) and Playa Lakes Joint Venture (PLJV) shapefiles; topographic maps; NMOSE, USGS, and United States Fish & Wildlife Service (USFWS) databases; and aerial imagery. The results are depicted in Figures 1, 2, 4, and 5.

Although portions of the spill affected a low-lying area to the southeast of the point of release, GIS map data provided on the websites of the USFWS's National Wetlands Inventory and the PLJV project does not identify the depression as either a wetland or a probable playa. In addition, elevation data indicates the change in elevation across the depression is less than 4 feet, ranging from 3,143 feet in the approximate center of the depression (i.e., the lowest-lying point) to 3,146 feet along the periphery. An elevation profile is provided in Appendix E.

Review of GIS map data acquired from the BLM at the time of the release indicated the Site is in an area of "medium" potential for encountering karst and naturally occurring sinkholes. An area of "high" potential was identified approximately 1 mile to the east-southeast of the site. Although the Site is located in an area of medium potential for karst occurrence, which is considered by the NMOCD to be stable, additional investigation into the potential for groundwater impact was warranted.

A search of groundwater quality data in the USGS's National Water Information System indicated the historic concentration of chloride in the area is 340 mg/L. On November 19, 2020, a groundwater sample was collected from a public water supply system well in the vicinity in an effort to confirm the background concentration of chloride at/near the Site. The groundwater sample was submitted to a certified commercial laboratory for analysis of total dissolved solids (TDS) and chloride. Laboratory analytical results indicated the TDS concentration was 2,050 mg/L. The chloride concentration was 356 mg/L, which exceeds the New Mexico Water Quality Control Commission (NMWQCC) standard of 250.0 mg/L specified in Section 20.6.2.3103 B.(1) of the New Mexico Administrative Code (NMAC).

The locations of the USGS and public water supply wells are depicted in Figure 6. Groundwater quality data is provided in Appendix F. Chloride migration modeling data is provided in Appendix G.

Based on the information summarized above, Mewbourne Oil Company requested Closure Criteria and Reclamation Standards for the Site as listed in the table below. The request was ultimately approved by the NMOCD and the BLM.

Probable Depth to Groundwater	Constituent	Method	Closure Criteria	Reclamation Standard*
95 feet	Chloride	EPA 300.0 or SM4500 Cl B	10,000 mg/kg	600 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	2,500 mg/kg	100 mg/kg
	DRO + GRO	EPA SW-846 Method 8015M	1,000 mg/kg	-
	BTEX	EPA SW-846 Methods 8021b or 8260b	50 mg/kg	50 mg/kg
	Benzene	EPA SW-846 Methods 8021b or 8260b	10 mg/kg	10 mg/kg

* The NMOCD Reclamation Standard applies only to the top 4' of soil in non-production areas.

4.0 PROPOSED REMEDIATION PLAN

Based on laboratory analytical results, site characteristics, and field observations made during the initial site assessment, Mewbourne Oil Company proposed the following remediation activities designed to advance the Site toward an approved closure:

- Utilizing mechanical equipment, excavate impacted soil affected above the NMOCD Closure Criteria as follows:
 - Approximately 3 feet bgs in the area characterized by sample point TT-5.
 - Approximately 4 feet bgs in the areas characterized by sample points TT-1 through TT-4.
- Advance the sidewalls of the excavated area until laboratory analytical results indicate impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard has been removed.
- Temporarily stockpile excavated material on-site, pending transfer to an NMOCD-approved facility for disposal.
- Upon excavating impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard, collect the requisite excavation confirmation soil samples.
- Upon receiving laboratory analytical results from excavation confirmation soil samples, backfill the excavated area with

locally sourced, non-impacted, "like" material, then compact and contour the area to match the surrounding topography.

- Upon completion of remediation activities, prepare a *Remediation Summary & Soil Closure Request* detailing field activities and laboratory analytical results from confirmation soil samples.

5.0 REGULATORY APPROVALS & STIPULATIONS

On November 10, 2020, based on the size and nature of the release, the anticipated prompt excavation of impacted soil, and the depth to groundwater, an *Alternative Sampling Plan* was submitted to the NMOCD proposing an alternative sampling plan to include the collection of composite soil samples every 50 linear feet from the excavation sidewalls and every 400 square feet from the base of the excavated area. A variance to collect TPH and BTEX confirmation samples at 100-foot horizontal increments was also requested. The *Alternative Sampling Plan* was subsequently approved by the NMOCD.

On December 14, 2020, a *Site Assessment Report and Proposed Remediation Workplan* was submitted to the NMOCD proposing the aforementioned remediation activities designed to advance the Site toward regulatory closure. The *Site Assessment Report and Proposed Remediation Workplan* was ultimately approved by the NMOCD and the BLM, with the condition that a layer of compacted caliche be installed from the base of the excavated area to approximately one (1) foot bgs to inhibit the vertical migration of chloride contamination.

Please reference the *Site Assessment Report and Proposed Remediation Workplan* (henceforth, "Workplan") for additional details regarding site characterization and proposed remediation activities. NMOCD and BLM correspondence is provided in Appendix H.

6.0 REMEDIATION ACTIVITIES SUMMARY

On November 10, 2020, Etech commenced remediation activities at the Site. In accordance with NMOCD regulatory guidelines and the approved Workplan, impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standards was excavated and stockpiled on-site, pending transfer to an NMOCD-approved surface waste facility for disposal. The floor and sidewalls of the excavation were advanced until field observations and test results suggested BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard.

Etech also collected seven (7) excavation confirmation soil samples (EW1, EW2, EW3, EW5, EW6, EW7, and EW9). The soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples, with the exception of sample EW2, which exhibited a chloride concentration over the NMOCD Reclamation Standard of 600 mg/kg.

On November 11, 2020, Etech collected two (2) excavation confirmation soil samples (EW4 E and EW8 B). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On November 12, 2020, Etech collected one (1) excavation confirmation soil sample (SW1 C). The soil sample was submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard.

On November 16, 2020, Etech collected 10 excavation confirmation soil samples (SW 2, WW 1B, WW 2B, WW 3, FL 5 4', FL 8 4', FL 9 4', FL 10 3', FL 17 4', and FL 20 4'). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On November 17, 2020, Etech collected six (6) excavation confirmation soil samples (WW 4B, WW 5B, FL 22 4', FL 24 4', FL 27 4', and FL 30 4'). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory

analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On November 23, 2020, Etech collected one (1) excavation confirmation soil sample (EW 10). The soil sample was submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard.

On November 25, 2020, Etech collected nine (9) excavation confirmation soil samples (FL 55 4', FL 56 4', FL 57 4', FL 65 4', FL 66 4', FL 71 4', FL 75 4', FL 82 4', and FL 84 4'). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On November 30, 2020, based on laboratory analytical results, the excavation was further advanced in the area characterized by soil sample EW2. Etech also collected three (3) excavation confirmation soil samples (EW 2B, EW 11, and WW 7). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On December 1, 2020, Etech collected two (2) excavation confirmation soil samples (EW 12 and WW 8). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On December 2, 2020, Etech collected two (2) excavation confirmation soil samples (EW 13 and WW 9). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On December 3, 2020, Etech collected seven (7) excavation confirmation soil samples (EW 14, EW 15, EW 16, and WW 10 through WW 13). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On December 4, 2020, Etech collected four (4) excavation confirmation soil samples (EW 17, EW 18, WW 14, and WW 15). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On December 7, 2020, Etech collected six (6) excavation confirmation soil samples (NW 1, SW 3, WW 6C, FL 118 @ 4', FL 128 @ 4', and FL 129 @ 4'). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On December 8, 2020, Etech collected two (2) excavation confirmation soil samples (NW 2 and SW 4). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On December 9, 2020, Etech collected eight (8) excavation confirmation soil samples (EW 19, NW 3, NW 4, NW 5, SW 5, SW 6, SW 7, and WW 16). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On December 10, 2020, Etech collected seven (7) excavation confirmation soil samples (NW 6, NW 7, NW 8, SW 7, SW 8, SW 9, and FL 131 @ 4'). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On December 15, 2020, Etech collected six (6) excavation confirmation soil samples (EW 20, EW 21, EW 22, SW 10, WW 17, and WW 18). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On December 16, 2020, based on field observations and field test results, the excavation was further advanced in the area characterized by soil sample WW18. Etech also collected two (2) excavation confirmation soil samples (WW 18B and WW 19B). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On December 28, 2020, Etech collected five (5) excavation confirmation soil samples (EW 23, EW 24, WW 20, WW 21, and WW 22). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On December 30, 2020, Etech collected five (5) excavation confirmation soil samples (EW 25, NW 10, SW 11, FL 155 @ 4', and FL 156 @ 4'). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On January 6, 2021, Etech collected 158 excavation confirmation soil samples (EW 26, NW 11 through NW 14, SW 12, SW 13, FL 2 @ 4', FL 13 @ 4', FL 15 @ 4', FL 18 @ 4', FL 23 @ 4', FL 29 @ 4', FL 34 @ 4', FL 35 @ 4', FL 39 @ 4' through FL 46 @ 4', FL 49 @ 4' through FL 53 @ 4', FL 60 @ 4', FL 61 @ 4', FL 63 @ 4', FL 64 @ 4', FL 68 @ 4' through FL 70 @ 4', FL 74 @ 4', FL 76 @ 4' through FL 78 @ 4', FL 81 @ 4', FL 83 @ 4', FL 85 @ 4' through FL 117 @ 4', FL 119 @ 4' through FL 127 @ 4', FL 130 @ 4', FL 132 @ 4' through FL 154 @ 4', FL 157 @ 4' through FL 207 @ 4'). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples, with the exceptions of samples FL 164 @ 3' and FL 176 @ 3', which exhibited chloride concentrations over the NMOCD Reclamation Standard of 600 mg/kg.

On January 7, 2021, based on field observations and field test results, the excavation was further advanced in the areas characterized by soil samples FL 98, FL 99, FL 102, and FL 192. Etech also collected 21 excavation confirmation soil samples (FL 98 @ 5', FL 99 @ 5', FL 102 @ 5', FL 192 @ 5', and FL 208 @ 4' through FL 224 @ 4'). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On January 18, 2021, based on laboratory analytical results, the excavation was further advanced in the areas characterized by soil samples FL 164 @ 3' and FL 176 @ 3'. Etech also collected three (3) excavation confirmation soil samples (FL 99 @ 5', FL 164 @ 4', and FL 176 @ 4'). The soil samples were submitted to the laboratory for analysis of chloride. Laboratory analytical results indicated chloride concentrations were below the NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

On January 19, 2021, Etech collected 34 excavation confirmation soil samples (NW 9, SW 12, WW 23, FL 1 @ 4', FL 3 @ 4', FL 4 @ 4', FL 6 @ 4', FL 7 @ 4', FL 11 @ 4', FL 12 @ 4', FL 14 @ 4', FL 16 @ 4', FL 19 @ 4', FL 21 @ 4', FL 25 @ 4', FL 26 @ 4', FL 28 @ 4', FL 31 @ 4' through FL 33 @ 4', FL 36 @ 4' through FL 38 @ 4', FL 47 @ 4', FL 48 @ 4', FL 54 @ 4', FL 58 @ 4', FL 59, FL 62, FL 67, FL 72, FL 73, FL 79, and FL 80). The soil samples were submitted to the laboratory for analysis of

BTEX, TPH, and/or chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

The final dimensions of the eastern portion of the excavated area were approximately 500 feet in length, 23 to 140 feet in width, and three (3) to four (4) feet in depth. The final dimensions of the western portion of the excavated area were approximately 1,070 feet in length, 20 to 221 feet in width, and three (3) to five (5) feet in depth. During the course of remediation activities, approximately 21,370 cubic yards of impacted soil were transported to an NMOCD-approved surface waste facility for disposal.

Soil sample locations and the footprint of the excavated area are depicted in Figure 3B, "Site & Sample Location Map - Excavation". Soil chemistry data is summarized in Table 1. Field notes and soil profile logs are provided in Appendix A. Laboratory analytical reports are provided in Appendix B. General photographs of the Site are provided in Appendix C.

7.0 RESTORATION, RECLAMATION & RE-VEGETATION PLAN

Upon receiving laboratory analytical results from confirmation soil samples, excavated areas were backfilled with locally sourced, non-impacted material. The affected areas were contoured and compacted to achieve erosion control, stability, and preservation of surface water flow to the extent practicable. Affected areas not on lease roads will be reseeded with an agency-approved seed mixture free of noxious weeds during the first favorable growing season following closure of the Site.

8.0 SOIL CLOSURE REQUEST

Remediation activities were conducted in accordance with an approved Workplan and subsequent correspondence with representatives of the NMOCD and the BLM. Impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard was excavated and transported to an NMOCD-approved disposal facility. Laboratory analytical results from confirmation soil samples indicate concentrations of BTEX, TPH, and chloride are below the NMOCD Closure Criteria and/or NMOCD Reclamation Standard. In accordance with the BLM, excavated areas were backfilled to approximately one (1) foot bgs with compacted caliche. This engineered control is designed to inhibit vertical migration of chloride contamination remaining in-situ.

Based on laboratory analytical results and field activities conducted to date, Etech recommends Mewbourne Oil Company provide copies of this *Remediation Summary & Soil Closure Request* to the appropriate agencies and request closure be granted to the Site.

9.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this *Remediation Summary & Soil Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents reference in the report and on oral statements made by certain individuals. Etech has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Mewbourne Oil Company. Use of the information contained in this report is prohibited without the consent of Etech and/or Mewbourne Oil Company.

10.0 DISTRIBUTION

Mewbourne Oil Company
4801 Business Park Blvd.
Hobbs, NM 88240

New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 2
811 S. First Street
Artesia, NM 88210

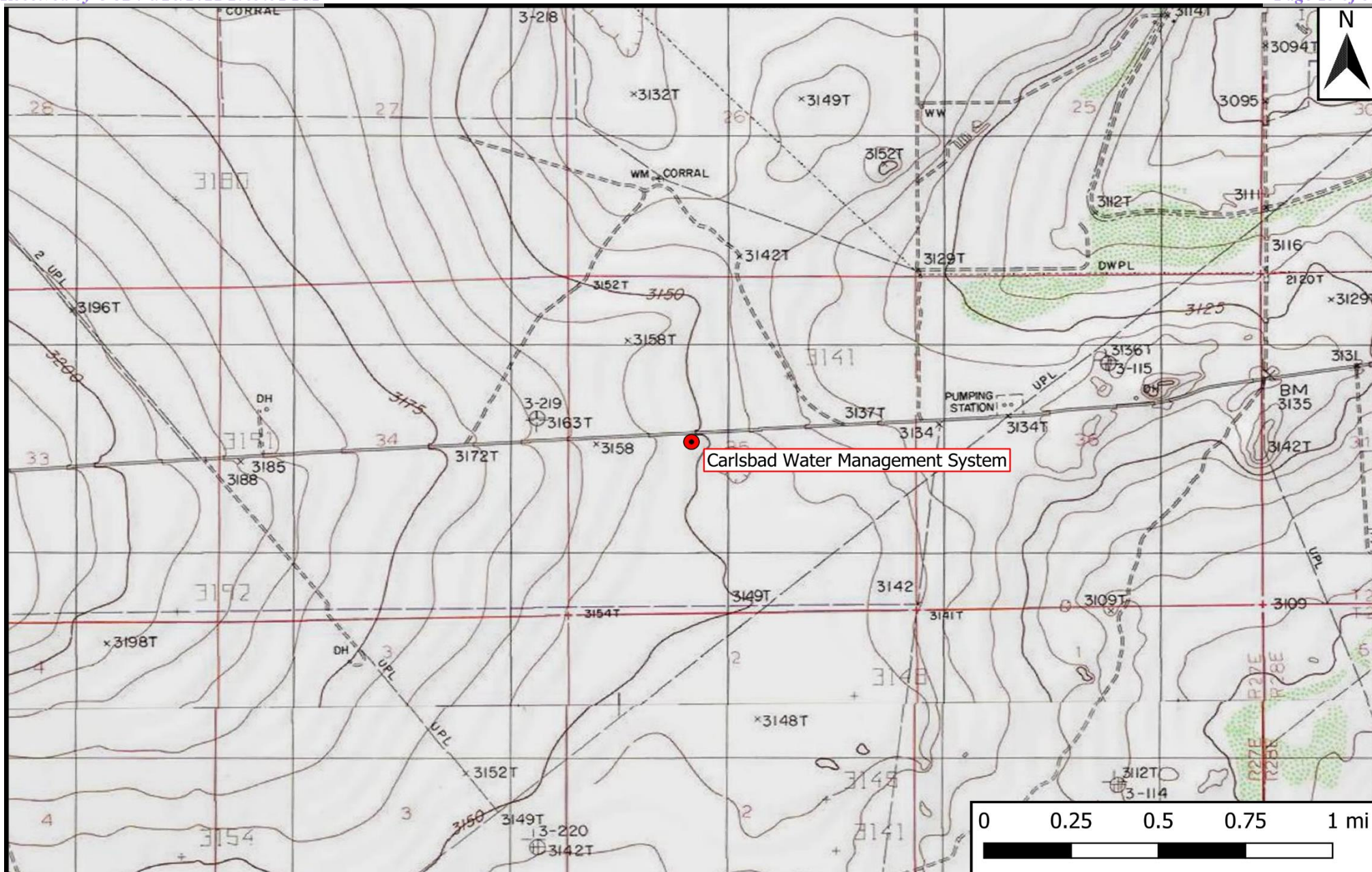
United States Department of the Interior
Bureau of Land Management

620 E. Greene Street
Carlsbad, NM 88220

(Electronic Submission)

Figure 1

Topographic Map



Legend


 Site Location

Figure 1

Topographic Map
Mewbourne Oil Company
Carlsbad Water Management System
GPS: 32.261438, -104.163478
Eddy County

ETECH 
Environmental & Safety Solutions, Inc.

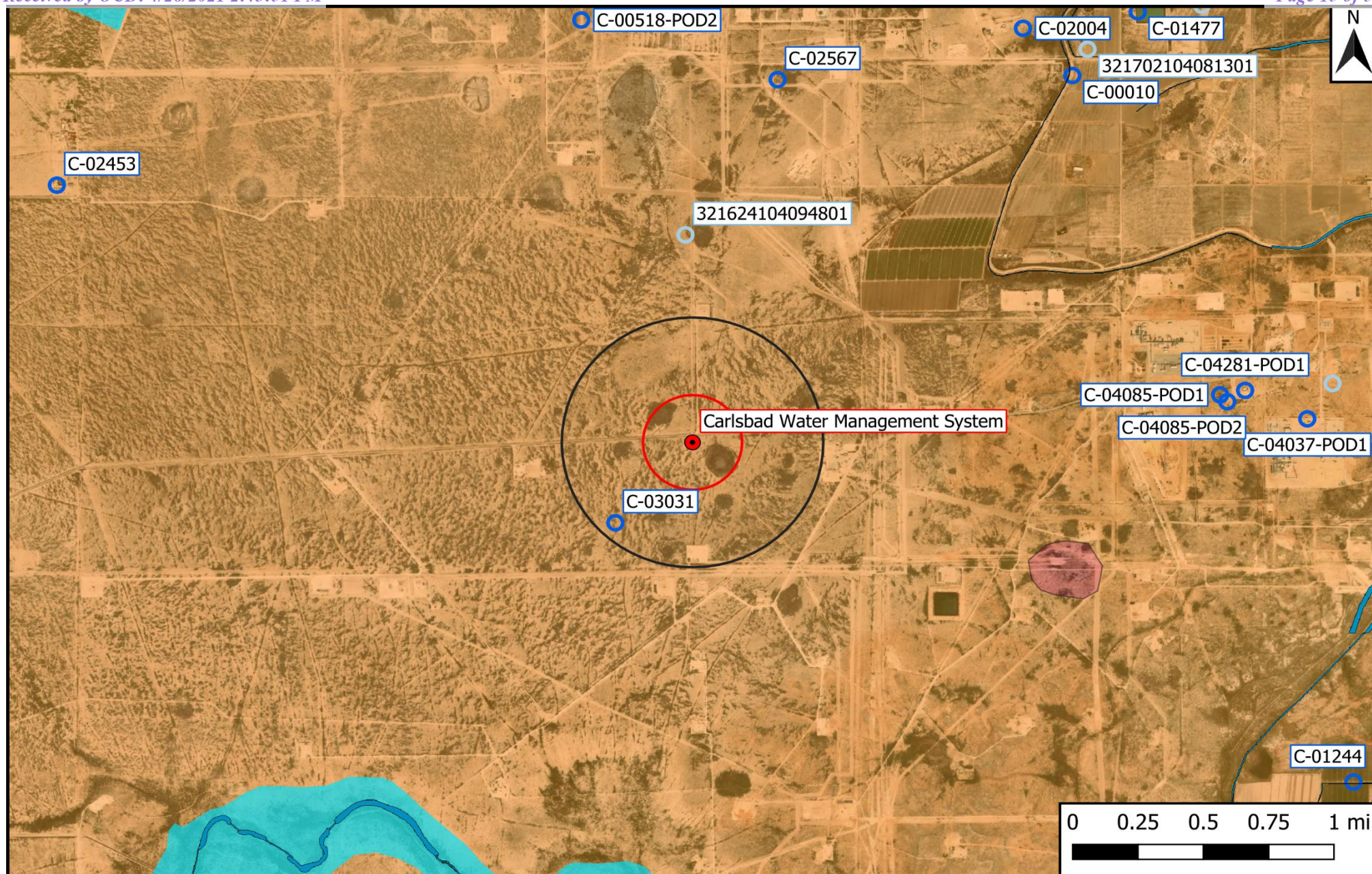
Drafted: bja

Checked: jwl

Date: 3/10/21

Figure 2

Aerial Proximity Map



Legend	1,000-Ft Radius
Site Location	0.5-Mi Radius
Well - NMOSE	1% Annual Flood Chance
Well - USGS	Emergent/Forested Wetlands
Well - Investigative/Monitor	Lake/Freshwater Pond
Potash Mine Workings	Medium/Hight Karst
	Riverine

Figure 2
Aerial Proximity Map
Mewbourne Oil Company
Carlsbad Water Management System
GPS: 32.261438, -104.163478
Eddy County

eTECH
Environmental & Safety Solutions, Inc.

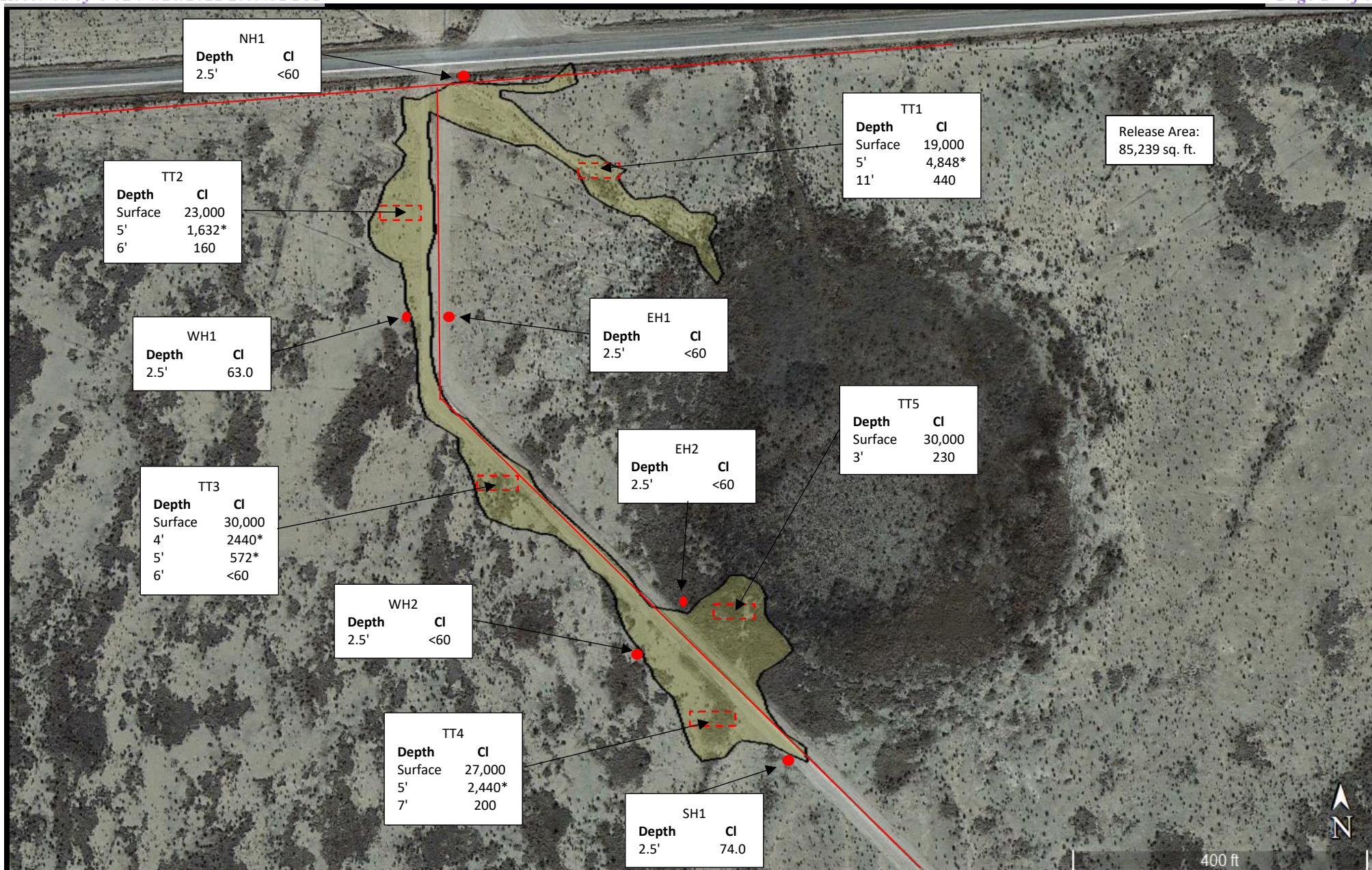
Drafted: bja

Checked: jwl

Date: 3/10/21

Figure 3A

Site & Sample Location Map - Delineation



Legend:

- Pipeline
- Release Area
- Test Trench
- Horizontal Sample

* Field test result

eTECH
 Environmental & Safety Solutions, Inc.

Drafted: bja

Checked: jwl

Date: 11/19/20

Figure 3B
Site & Sample Location Map - Excavation



Legend ✕ Floor Sample - - - Wall Sample █ Excavation (3' - 4' bgs) ██ Excavation (5' bgs)	Figure 3B Site & Sample Location Map - Excavation Mewbourne Oil Company Carlsbad Water Management System GPS: 32.261438, -104.163478 Eddy County, NM	 ETECH Environmental & Safety Solutions, Inc. Drafted: MAG Checked: BJA Date: 3/11/2021
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Table 1
Concentrations of BTEX, TPH & Chloride in Soil

TABLE 1
CONCENTRATIONS OF BTEX, TPH & CHLORIDE IN SOIL
Mewbourne Oil Company
Carlsbad Water Management System
NMOCD Ref. #: nRM2030230289

NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	10,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
TT1 @ Surface	11/9/2020	0'	Excavated	ND	ND	ND	660	660	630	1,290	19,000
TT1 @ 11'	11/9/2020	11'	In-Situ	ND	ND	ND	ND	ND	ND	ND	440
TT2 @ Surface	11/9/2020	0'	Excavated	ND	ND	ND	16.0	16.0	ND	16.0	23,000
TT2 @ 6'	11/9/2020	6'	In-Situ	ND	ND	ND	ND	ND	ND	ND	160
TT3 @ Surface	11/9/2020	0'	Excavated	ND	ND	ND	780	780	440	1,220	30,000
TT3 @ 6'	11/9/2020	6'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
TT4 @ Surface	11/9/2020	0'	Excavated	ND	ND	6.80	34.0	40.8	ND	40.8	27,000
TT4 @ 7'	11/9/2020	7'	In-Situ	ND	ND	ND	ND	ND	ND	ND	200
TT5 @ Surface	11/9/2020	0'	Excavated	ND	ND	ND	9.70	9.70	ND	9.70	30,000
TT5 @ 3'	11/9/2020	3'	Excavated	ND	ND	ND	ND	ND	ND	ND	230
WH1 @ 2.5'	11/9/2020	2.5'	In-Situ	ND	ND	ND	ND	ND	ND	ND	63.0
WH2 @ 2.5'	11/9/2020	2.5'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
SH1 @ 2.5'	11/9/2020	2.5'	In-Situ	ND	ND	ND	ND	ND	ND	ND	74.0
NH1 @ 2.5'	11/9/2020	2.5'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EH1 @ 2.5'	11/9/2020	2.5'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EH2 @ 2.5'	11/9/2020	2.5'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 1	11/10/2020	2.5'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 2	11/10/2020	2.5'	Excavated	ND	ND	ND	ND	ND	ND	ND	1,600
EW 2B	11/30/2020	2.5'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 3	11/10/2020	2.5'	In-Situ	ND	ND	ND	ND	ND	ND	ND	310
EW 4E	11/11/2020	2.5'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 5	11/10/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	71.0
EW 6	11/10/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 7	11/10/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 8B	11/11/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	180
EW 9	11/10/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	84.0
EW 10	11/23/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	99.0
EW 11	11/30/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 12	12/1/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 13	12/2/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 14	12/3/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	190
EW 15	12/3/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 16	12/3/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 17	12/4/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 18	12/4/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 19	12/9/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 20	12/15/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 21	12/15/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 22	12/15/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 23	12/28/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	90.0
EW 24	12/28/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	76.0

NOTES:

- = Sample not analyzed for that constituent.

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria*Italicized* text denotes a concentration at or below the Detection Limit

TABLE 1
CONCENTRATIONS OF BTEX, TPH & CHLORIDE IN SOIL
Mewbourne Oil Company
Carlsbad Water Management System
NMOCD Ref. #: nRM2030230289

NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	10,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
EW 25	12/30/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW 26	1/6/2021	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	71.0
NW 1	12/7/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
NW 2	12/8/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
NW 3	12/9/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
NW 4	12/9/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
NW 5	12/9/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	91.0
NW 6	12/10/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	61.0
NW 7	12/10/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	70.0
NW 8	12/10/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	70.0
NW 9	1/19/2021	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	91.0
NW 10	12/30/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
NW 11	1/6/2021	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
NW 12	1/6/2021	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
NW 13	1/6/2021	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	68.0
NW 14	1/6/2021	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	65.0
SW 1 C	11/12/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
SW 2	11/16/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
SW 3	12/7/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
SW 4	12/8/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
SW 5	12/9/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
SW 6	12/9/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
SW 7	12/9/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	72.0
SW 7	12/10/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
SW 8	12/10/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
SW 9	12/10/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
SW 10	12/15/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
SW 11	12/30/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	110
SW 12	1/6/2021	2'	In-Situ	-	-	-	-	-	-	-	ND
SW 12	1/19/2021	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
SW 13	1/6/2021	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 1B	11/16/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 2B	11/16/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	76.0
WW 3	11/16/2020	2'	In-Situ	ND	ND	ND	11.0	11.0	ND	11.0	ND
WW 4B	11/17/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 5B	11/17/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	67.0
WW 6C	12/7/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 7	11/30/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 8	12/1/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 9	12/2/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	80.0
WW 10	12/3/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	65.0

NOTES:

- = Sample not analyzed for that constituent.

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria*Italicized text denotes a concentration at or below the NMOCD Closure Criteria*

TABLE 1
CONCENTRATIONS OF BTEX, TPH & CHLORIDE IN SOIL
Mewbourne Oil Company
Carlsbad Water Management System
NMOCD Ref. #: nRM2030230289

NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	10,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
WW 11	12/3/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 12	12/3/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	81.0
WW 13	12/3/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	320
WW 14	12/4/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 15	12/4/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 16	12/9/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 17	12/15/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	120
WW 18	12/15/2020	2'	Excavated	ND	ND	ND	ND	ND	ND	ND	ND
WW 18B	12/16/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 19B	12/16/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 20	12/28/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 21	12/28/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW 22	12/28/2020	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	110
WW 23	1/19/2021	2'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
FL 1 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	650
FL 2 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,300
FL 3 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	1,000
FL 4 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	310
FL 5 4'	11/16/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	230
FL 6 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	210
FL 7 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	1,100
FL 8 4'	11/16/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
FL 9 4'	11/16/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
FL 10 3'	11/16/2020	3'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
FL 11 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	390
FL 12 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	1,700
FL 13 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,400
FL 14 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	1,100
FL 15 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,300
FL 16 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	1,000
FL 17 4'	11/16/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	160
FL 18 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	6,500
FL 19 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	1,400
FL 20 4'	11/16/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	140
FL 21 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	870
FL 22 4'	11/17/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	120
FL 23 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,100
FL 24 4'	11/17/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	69.0
FL 25 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	900
FL 26 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	1,700
FL 27 4'	11/17/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	170

NOTES:

- = Sample not analyzed for that constituent.

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TABLE 1
CONCENTRATIONS OF BTEX, TPH & CHLORIDE IN SOIL
Mewbourne Oil Company
Carlsbad Water Management System
NMOCD Ref. #: nRM2030230289

NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	10,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
FL 28 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	710
FL 29 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	6,200
FL 30 4'	11/17/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	63.0
FL 31 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	430
FL 32 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	340
FL 33 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	1,300
FL 34 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,100
FL 35 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,200
FL 36 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	87.0
FL 37 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	840
FL 38 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	3,500
FL 39 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,100
FL 40 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	5,000
FL 41 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,300
FL 42 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,000
FL 43 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,700
FL 44 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	5,700
FL 45 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	8,300
FL 46 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,900
FL 47 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	2,200
FL 48 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	780
FL 49 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,900
FL 50 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	6,700
FL 51 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,800
FL 52 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,000
FL 53 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	5,900
FL 54 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	910
FL 55 4'	11/25/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	110
FL 56 4'	11/25/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
FL 57 4'	11/25/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	80.0
FL 58 @ 4'	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	870
FL 59	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	430
FL 60 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,900
FL 61 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,200
FL 62	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	1,600
FL 63 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,100
FL 64 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,500
FL 65 4'	11/25/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	180
FL 66 4'	11/25/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	310
FL 67	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	1,300
FL 68 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,200

NOTES:

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TABLE 1
CONCENTRATIONS OF BTEX, TPH & CHLORIDE IN SOIL
Mewbourne Oil Company
Carlsbad Water Management System
NMOCD Ref. #: nRM2030230289

NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	10,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
FL 69 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,600
FL 70 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,000
FL 71 4'	11/25/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	370
FL 72	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	1,900
FL 73	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	1,800
FL 74 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,500
FL 75 4'	11/25/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	210
FL 76 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,100
FL 77 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	5,000
FL 78 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,200
FL 79	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	2,300
FL 80	1/19/2021	4'	In-Situ	-	-	-	-	-	-	-	2,100
FL 81 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	5,400
FL 82 4'	11/25/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	420
FL 83 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,400
FL 84 4'	11/25/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	430
FL 85 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,800
FL 86 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,700
FL 87 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,200
FL 88 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,500
FL 89 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,400
FL 90 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	72.0
FL 91 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,900
FL 92 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	ND
FL 93	1/6/2021	5'	In-Situ	-	-	-	-	-	-	-	5,200
FL 94	1/6/2021	5'	In-Situ	-	-	-	-	-	-	-	2,100
FL 95	1/6/2021	5'	In-Situ	-	-	-	-	-	-	-	3,300
FL 96	1/6/2021	5'	In-Situ	-	-	-	-	-	-	-	4,300
FL 97	1/6/2021	5'	In-Situ	-	-	-	-	-	-	-	9,000
FL 98	1/6/2021	4'	Excavated	-	-	-	-	-	-	-	5,900
FL 98 @ 5'	1/7/2021	5'	In-Situ	-	-	-	-	-	-	-	320
FL 99	1/6/2021	4'	Excavated	-	-	-	-	-	-	-	10,000
FL 99 @ 5'	1/7/2021	5'	Excavated	-	-	-	-	-	-	-	1,700
FL 99 @ 5'	1/18/2021	5'	In-Situ	-	-	-	-	-	-	-	2,700
FL 100	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,500
FL 101	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	5,600
FL 102	1/6/2021	4'	Excavated	-	-	-	-	-	-	-	7,500
FL 102 @ 5'	1/7/2021	5'	In-Situ	-	-	-	-	-	-	-	2,200
FL 103	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	5,800
FL 104	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,800
FL 105 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,200

NOTES:

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TABLE 1
CONCENTRATIONS OF BTEX, TPH & CHLORIDE IN SOIL
Mewbourne Oil Company
Carlsbad Water Management System
NMOCD Ref. #: nRM2030230289

NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	10,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
FL 106 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,700
FL 107 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,000
FL 108 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	6,200
FL 109 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,600
FL 110 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,100
FL 111 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,200
FL 112 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,300
FL 113 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,900
FL 114 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,600
FL 115 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,600
FL 116 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,700
FL 117 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,900
FL 118 @ 4'	12/7/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	300
FL 119 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,200
FL 120 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,000
FL 121 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,600
FL 122 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,800
FL 123 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,200
FL 124 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,900
FL 125 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,700
FL 126 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,300
FL 127 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,800
FL 128 @ 4'	12/7/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	150
FL 129 @ 4'	12/7/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	540
FL 130 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	230
FL 131 @ 4'	12/10/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
FL 132 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,300
FL 133 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	6,200
FL 134 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	380
FL 135 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,200
FL 136 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	7,100
FL 137 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,300
FL 138 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,300
FL 139 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,300
FL 140 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,600
FL 141 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,200
FL 142 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	6,300
FL 143 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,100
FL 144 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,000
FL 145 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	5,900
FL 146 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	6,700

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TABLE 1
CONCENTRATIONS OF BTEX, TPH & CHLORIDE IN SOIL
Mewbourne Oil Company
Carlsbad Water Management System
NMOCD Ref. #: nRM2030230289

NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	10,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
FL 147 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	8,300
FL 148 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,200
FL 149 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,400
FL 150 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,400
FL 151 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	370
FL 152 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,400
FL 153 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,300
FL 154 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	5,600
FL 155 @ 4'	12/30/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
FL 156 @ 4'	12/30/2020	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
FL 157 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,300
FL 158 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	180
FL 159 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,300
FL 160 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,700
FL 161 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,700
FL 162 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	210
FL 163 @ 3'	1/6/2021	3'	In-Situ	-	-	-	-	-	-	-	ND
FL 164 @ 3'	1/6/2021	3'	Excavated	-	-	-	-	-	-	-	690
FL 164 @ 4'	1/18/2021	4'	In-Situ	-	-	-	-	-	-	-	63.0
FL 165 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	ND
FL 166 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	130
FL 167 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	120
FL 168 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	120
FL 169 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	91.0
FL 170 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	85.0
FL 171 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	220
FL 172 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	810
FL 173 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,700
FL 174 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	200
FL 175 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	610
FL 176 @ 3'	1/6/2021	3'	Excavated	-	-	-	-	-	-	-	1,700
FL 176 @ 4'	1/18/2021	4'	In-Situ	-	-	-	-	-	-	-	110
FL 177 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,600
FL 178 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,300
FL 179 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	900
FL 180 @ 3'	1/6/2021	3'	In-Situ	-	-	-	-	-	-	-	150
FL 181 @ 3'	1/6/2021	3'	In-Situ	-	-	-	-	-	-	-	93.0
FL 182 @ 3'	1/6/2021	3'	In-Situ	-	-	-	-	-	-	-	83.0
FL 183 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,100
FL 184 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	280
FL 185 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,200

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TABLE 1
CONCENTRATIONS OF BTEX, TPH & CHLORIDE IN SOIL
Mewbourne Oil Company
Carlsbad Water Management System
NMOCD Ref. #: nRM2030230289

NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	10,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
FL 186 @ 3'	1/6/2021	3'	In-Situ	-	-	-	-	-	-	-	210
FL 187 @ 3'	1/6/2021	3'	In-Situ	-	-	-	-	-	-	-	71.0
FL 188 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,200
FL 189 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,900
FL 190 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,400
FL 191 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	130
FL 192 @ 4'	1/6/2021	4'	Excavated	-	-	-	-	-	-	-	9,100
FL 192 @ 5'	1/7/2021	5'	In-Situ	-	-	-	-	-	-	-	2,900
FL 193 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	4,400
FL 194 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,300
FL 195 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	5,200
FL 196 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	420
FL 197 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,300
FL 198 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	3,700
FL 199 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	630
FL 200 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,300
FL 201 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	930
FL 202 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,500
FL 203 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	2,200
FL 204 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	310
FL 205 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	1,200
FL 206 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	150
FL 207 @ 4'	1/6/2021	4'	In-Situ	-	-	-	-	-	-	-	300
FL 208 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 209 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 210 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 211 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 212 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 213 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 214 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 215 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 216 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 217 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 218 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 219 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 220 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 221 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 222 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 223 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-
FL 224 @ 4'	1/7/2021	4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	-

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Appendix A

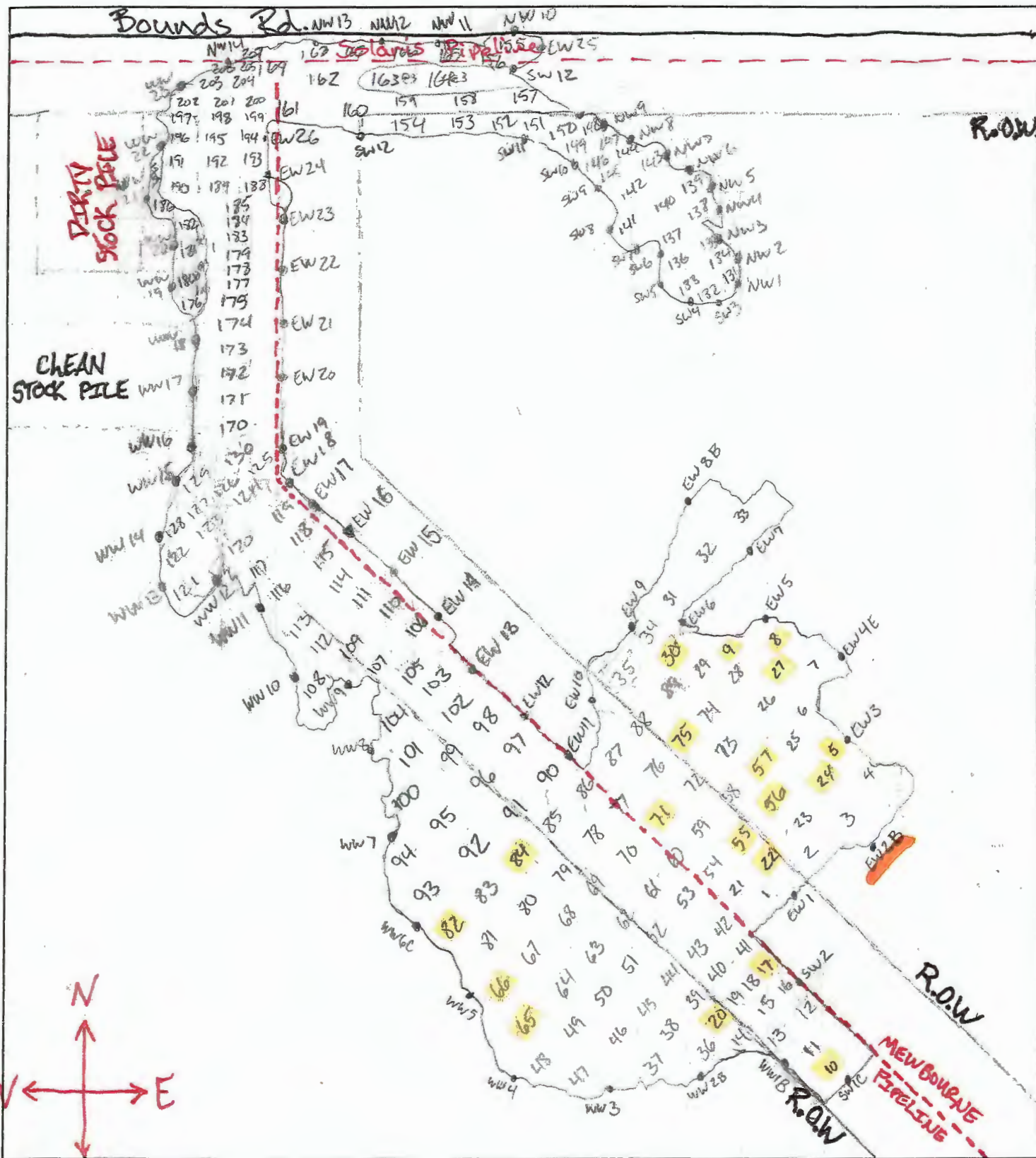
Field Data & Soil Profile Logs



Field Map

Project: CWMS

Date: 11/18/20





Sample Log

Date: 11/9/20Project: CWMS ReleaseProject Number: 13296Latitude: 32.261438Longitude: -104.163478

Sample ID	PID/Odor	Chloride Conc.	GPS
TT1 @ Surface		8.8 25336	
TT1 @ 1'			
TT1 @ 2'			
TT1 @ 3'			
TT1 @ 4'		5644	
TT1 @ 5'		4848	
TT1 @ 6'			
TT1 @ 7'			
TT1 @ 8'		>2440	
TT1 @ 9'		1016	
TT1 @ 10'		516	
TT1 @ 11'		464	
TT2 @ Surface		8.9 19928	
TT2 @ 1'			
TT2 @ 2'			
TT2 @ 3'			
TT2 @ 4'			
TT2 @ 5'		1632	
TT2 @ 6'		724	
TT3 @ Surface		8.8 25336	
TT3 @ 1'			
TT3 @ 2'			
TT3 @ 3'			
TT3 @ 4'		>2440	
TT3 @ 5'		572	
TT3 @ 6'		ND	
TT4 @ Surface		8.8 25336	
TT4 @ 1'			
TT4 @ 2'			
TT4 @ 3'			
TT4 @ 4'		>2440	
TT4 @ 5'		>2440	
TT4 @ 6'		748	
TT4 @ 7'		268	
TT5 @ Surface		9.2 >25336	
TT5 @ 1'			

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples = SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas



Sample Log

Date: 11/9/20Project: CWMS ReleaseProject Number: 13296Latitude: 32.261438Longitude: -104.163478

Sample ID	PID/Odor	Chloride Conc.	GPS
TT5 @ 2'	-		
TT5 @ 3'	-	572	
TT5 @ 4'	-		
TT5 @ 5'	-		
SH1 @ 2 1/2'	-	120	
EH2 @ 2 1/2'	-	ND	1.4
WH2 @ 2 1/2'	-	ND	1.4
WH1 @ 2 1/2'	-	120	
EH1 @ 2 1/2'	-	ND	1.4
NH1 @ 2 1/2'	-	ND	1.4
Confirmation Samples			
EW1	None	148	
EW2	None	412	
EW3	None	516	
EW4	None	1988	
EW5	None	184	
EW6	None	224	
EW7	None	316	
EW8	None	1340	
EW9	None	412	
EW4B	None	876	
FL1 @ 3'	-	1988	
FL2 @ 3'	-	1432	
FL3 @ 3'	-	628	
FL4 @ 2'	-	876	
FL5 @ 3'	-	1432	
FL6 @ 3'	-	1432	
FL7 @ 3'	-	1340	
FL8 @ 3'	-	1340	
FL9 @ 2'	-	1432	
EW8B	-	184	
EW4B	-	1616	
EW4C	-	1340	
EW4D	-	876	
EW4E	-	364	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples = SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas



Sample Log

Date: 11/12/20

Project: CWMS Release

Project Number: 13296

Latitude: 37.261438

Longitude: -104.163428

Sample ID	PID/Odor	Chloride Conc.	GPS
SW 1C'	none	316	
SW 2	none	<120	
WW 1	light	>2440	
WW 2	light	>2440	
FL 1 @ 4'	none	1252	
FL 2 @ 4'	light	>2440	
FL 3 @ 4'	none	1016	
FL 4 @ 4'	none	748	
FL 5 @ 4'	none	572	
FL 6 @ 4'	none	628	
FL 7 @ 4'	none	1016	
FL 8 @ 4'	none	120	
FL 9 @ 4'	none	364	
FL 10 @ 3'	none	148	
FL 11 @ 3'	none	812	
FL 12 @ 4'	none	628	
FL 13 @ 4'	none	>2440	
FL 14 @ 4'	none	1432	
FL 15 @ 4'	light	>2440	
FL 16 @ 4'	none	1252	
FL 17 @ 4'	none	224	
FL 18 @ 4'	light	>2440	
FL 19 @ 4'	none	1432	
FL 20 @ 4'	none	316	
WW 1B	none	<120	
WW 2B	none	268	
WW 3	none	184	
FL 21 @ 4'	none	1432	
FL 22 @ 4'	none	184	
FL 23 @ 4'	light	>2440	
FL 24 @ 4'	none	268	
FL 25 @ 4'	none	1528	
FL 26 @ 4'	none	1740	
FL 27 @ 4'	none	412	
FL 28 @ 4'	none	688	
FL 29 @ 4'	light	>2440	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples = SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas



Sample Log

Date:

11/17/20

Project: CWMS ReleaseProject Number: 13296Latitude: 32.261438Longitude: -104.163428

Sample ID	PID/Odor	Chloride Conc.	GPS
FL 30 @ 4'	None	412	
FL 31 @ 4'	None	948	
FL 32 @ 4'	None	688	
FL 33 @ 4'	None	1740	
FL 34 @ 4'	light	2440	
FL 35 @ 4'	light	2440	
WW 4	None	688	
WW 5	None	1432	
WW 4B	None	ND <120	
WW 5B	None	ND <120	
FL 36 @ 4'	-	184	
FL 37 @ 4'	-	876	
FL 38 @ 4'	-	1988	
FL 39 @ 4'	-	>2440	
FL 40 @ 4'	-	>2440	
FL 41 @ 4'	-	2124	
FL 42 @ 4'	-	>2440	
FL 43 @ 4'	-	>2440	
FL 44 @ 4'	-	>2440	
FL 45 @ 4'	-	>2440	
WW 6	Light	2124	
WW 6B	-	2440	
WW 6C	-	184	
WW 7	Light	2124	
WW 7B	None	1528	
WW 7C	None	1432	
EW 10	None	516	
FL 46 @ 4'	-	>2440	
FL 47 @ 4'	-	464	
FL 48 @ 4'	-	1016	
FL 49 @ 4'	-	>2440	
FL 50 @ 4'	-	>2440	
FL 51 @ 4'	-	>2440	
FL 52 @ 4'	-	>2440	
FL 53 @ 4'	-	>2440	
FL 54 @ 4'	-	412	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples = SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas



Sample Log

Date: 11/24/20Project: CWMS RELEASEProject Number: 13296Latitude: 32.261438Longitude: -104.163428

Sample ID	PID/Odor	Chloride Conc.	GPS
FL 55 @ 4'	None	148	
FL 56 @ 4'	-	268	
FL 57 @ 4'	-	ND	
FL 58 @ 4'	-	812	
FL 59 @ 4'	-	412	
FL 60 @ 4'	-	72440	
FL 61 @ 4'	-	72440	
FL 62 @ 4'	-	1432	
FL 63 @ 4'	-	2440	
FL 64 @ 4'	-	72440	
FL 65 @ 4'	-	184	
FL 66 @ 4'	-	184	
FL 67 @ 4'	-	688	
FL 68 @ 4'	-	2440	
FL 69 @ 4'	-	2440	
FL 70 @ 4'	-	2440	
FL 71 @ 4'	-	412	
FL 72 @ 4'	-	1860	
FL 73 @ 4'	-	1252	
FL 74 @ 4'	-	2440	
FL 75 @ 4'	-	148	
FL 76 @ 4'	-	2440	
FL 77 @ 4'	-	72440	
FL 78 @ 4'	-	72440	
FL 79 @ 4'	-	1252	
FL 80 @ 4'	-	812	
FL 81 @ 4'	-	72440	
FL 82 @ 4'	-	184	
FL 83 @ 4'	-	72440	
FL 84 @ 4'	-	316	
FL 85 @ 4'	-	72440	
FL 86 @ 4'	-	72440	
FL 87 @ 4'	-	2440	
FL 88 @ 4'	-	2276	
FL 89 @ 4'	-	2440	
FL 90 @ 4'	-	5232	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples = SP #1 @ Sb or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas



Sample Log

Date: 11/24/20

Project: CWMS Release

Project Number: 13296

Latitude: 32.261438

Longitude: -104.163428

Sample ID	PID/Odor	Chloride Conc.	GPS
FL 91 @ 4'	none	3832	
FL 92 @ 4'	-	6084	
FL 93 @ 4'	-	5644	
FL 94 @ 4'	-	3832	
FL 95 @ 4'	-	4848	
FL 96 @ 4'	-	5644	
EW 2B	-	ND	
EW 11	-	120	
WW 7	-	170	
EW 12	-	148	
WW 8	-	184	
EW 13	-	120	
EW 14	-	224	
WW 9	-	148	
WW 10	-	120	
WW 11	-	ND	
EW 15	-	ND	
FL 97 @ 4'	-	5232	
FL 98 @ 4'	-	8900	
FL 99 @ 4'	-	10432	
FL 100 @ 4'	-	5232	
FL 101 @ 4'	-	6084	
FL 102 @ 4'	-	8240	
FL 103 @ 4'	-	6084	
FL 104 @ 4'	-	3832	
FL 105 @ 4'	-	2736	
FL 106 @ 4'	-	1988	
FL 107 @ 4'	-	2504	
FL 108 @ 4'	-	5232	
FL 109 @ 4'	-	1988	
FL 110 @ 4'	-	1432	
FL 111 @ 4'	-	1432	
FL 112 @ 4'	-	7076	
FL 113 @ 4'	-	5644	
FL 114 @ 4'	-	3832	
FL 115 @ 4'	-	4848	

Sample Point = SP #1 @ ## etc

Test Trench = TT #1 @ ##

Resamples = SP #1 @ Sb or SW #1b

Floor = FL #1 etc

Refusal = SP #1 @ 4'-R

Stockpile = Stockpile #1

Sidewall = SW #1 etc

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

GPS Sample Points, Center of Comp Areas



Sample Log

Date:

12/10/20

Project: CWMs Release

Project Number: 13296

Latitude:

Longitude:

Sample ID	PID/Odor	Chloride Conc.	GPS
SW 10	-	ND	
SW 11	-	ND	
NW 6	-	ND	
NW 7	-	ND	
NW 8	-	ND	
NW 9	-	ND	
NW 10	-	ND	
EW 20	-	ND	
EW 21	-	ND	
EW 22	-	ND	
WW 17	-	ND	
WW 18	-	ND	
WW 19	-	948	
WW 19B	-	ND	
WW 20	-	868	
WW 20B	-	ND	
WW 20	-	ND	
WW 21	-	ND	
WW 22	-	ND	
EW 23	-	ND	
EW 24	-	ND	
NW 11	-	ND	
NW 12	-	ND	
NW 13	-	ND	
NW 14	-	ND	
SW 12	-	ND	
EW 25	-	ND	
EW 26	-	ND	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples= SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas



Sample Log

Date: _____

Project: _____

Project Number: _____ Latitude: _____ Longitude: _____

Sample ID	PID/Odor	Chloride Conc.	GPS
EW 16	-	120	
WW 12	-	184	
WW 13	-	464	
WW 14	-	120	
WW 15	-	120	
EW 17	-	ND	
EW 18	-	ND	
FL 116 @ 4'	-	3668	
FL 117 @ 4'	-	2824	
FL 118 @ 4'	-	224	
FL 119 @ 4'	-	3368	
FL 120 @ 4'	-	1432	
FL 121 @ 4'	-	3668	
FL 122 @ 4'	-	2824	
FL 123 @ 4'	-	3988	
FL 124 @ 4'	-	1328	
FL 125 @ 4'	-	3088	
FL 126 @ 4'	-	2132	
FL 127 @ 4'	-	1388	
FL 128 @ 4'	-	184	
FL 129 @ 4'	-	412	
FL 130 @ 4'	-	688	
SW 3	-	ND	
NW 1	-	ND	
EW 19	-	ND	
WW 16	-	120	
SW 4	-	ND	
SW 5	-	ND	
NW 2	-	148	
NW 3	-	120	
SW 6	-	120	
NW 4	-	ND	
NW 5	-	ND	
SW 7	-	ND	
SW 8	-	ND	
SW 9	-	ND	

Sample Point = SP #1 @ ## etc

Test Trench = TT #1 @ ##

Resamples = SP #1 @ Sb or SW #1b

Floor = FL #1 etc

Refusal = SP #1 @ 4' R

Stockpile = Stockpile #1

Sidewall = SW #1 etc

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

GPS Sample Points, Center of Comp Areas



Sample Log

Date: 12/10/20Project: CWMS ReleaseProject Number: 13296

Latitude: _____

Longitude: _____

Sample ID	PID/Odor	Chloride Conc.	GPS
FL 131 @ 4'	-	ND	
FL 132 @ 4'	-	3368	
FL 133 @ 4'	-	5528	
FL 134 @ 4'	-	1172	
FL 135 @ 4'	-	3088	
FL 136 @ 4'	-	6500	
FL 137 @ 4'	-	1016	
FL 138 @ 4'	-	2348	
FL 139 @ 4'	-	1740	
FL 140 @ 4'	-	1432	
FL 141 @ 4'	-	4700	
FL 142 @ 4'	-	5992	
FL 143 @ 4'	-	5992	
FL 144 @ 4'	-	4328	
FL 145 @ 4'	-	4328	
FL 146 @ 4'	-	5992	
FL 147 @ 4'	-	6560	
FL 148 @ 4'	-	6560	
FL 149 @ 4'	-	5992	
FL 150 @ 4'	-	5992	
FL 151 @ 4'	-	628	
FL 152 @ 4'	-	3088	
FL 153 @ 4'	-	3088	
FL 154 @ 4'	-	5528	
FL 155 @ 4'	-	ND	
FL 156 @ 4'	-	ND	
FL 157 @ 4'	-	1172	
FL 158 @ 4'	-	120	
FL 159 @ 4'	-	1740	
FL 160 @ 4'	-	2572	
FL 161 @ 4'	-	1740	
FL 162 @ 4'	-	316	
FL 163 @ 3'	-	ND	
FL 164 @ 3'	-	ND	
FL 165 @ 4'	-	ND	
FL 166 @ 4'	-	120	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples = SP #1 @ Sb or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

KE-TESTS

Sample Log

H.S.

Date:

1/5/21

Project:

PWMS Release

Project Number:

13296

Latitude:

Longitude:

Sample ID	PID/Odor	Chloride Conc.	GPS
FL 2 @ 4'	-	2132	
FL 13 @ 4'	-	2824	
FL 15 @ 4'	-	3668	
FL 18 @ 4'	-	4700	
FL 23 @ 4'	-	3668	
FL 29 @ 4'	-	5528	
FL 34 @ 4'	-	2580	
FL 35 @ 4'	-	1732	
FL 39 @ 4'	-	4328	
FL 40 @ 4'	-	4700	
FL 41 @ 4'	-	2824	
FL 42 @ 4'	-	3088	
FL 43 @ 4'	-	3368	
FL 44 @ 4'	-	4700	
FL 45 @ 4'	-	5992	
FL 46 @ 4'	-	1928	
FL 49 @ 4'	-	3368	
FL 50 @ 4'	-	4700	
FL 51 @ 4'	-	2824	
FL 52 @ 4'	-	2580	
FL 53 @ 4'	-	4328	
FL 60 @ 4'	-	2580	
FL 61 @ 4'	-	3088	
FL 63 @ 4'	-	3088	
FL 64 @ 4'	-	3668	
FL 69 @ 4'	-	1732	
FL 70 @ 4'	-	2580 2580	
FL 74 @ 4'	-	2580	
FL 76 @ 4'	-	2580	
FL 77 @ 4'	-	3668	
FL 78 @ 4'	-	3668	
FL 81 @ 4'	-	4328	
FL 83 @ 4'	-	2132	
FL 85 @ 4'	-	5528	
FL 86 @ 4'	-	3088	
FL 87 @ 4'	-	2348	

Sample Point = SP #1 @ ## etc

Test Trench = TT #1 @ ##

Resamples = SP #1 @ 5b or SW #1b

Floor = FL #1 etc

Refusal = SP #1 @ 4'-R

Stockpile = Stockpile #1

Sidewall = SW #1 etc

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

GPS Sample Points, Center of Comp Areas

Sample Log

High ~~Strips~~ Strips

Date:

$$\sqrt{512}$$

Project: CWMS Release

Project Number: 13296

Latitude:

Longitude:

[illegible]

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil intended to be Deferred = SP #1 @ 4' In-Situ

Resamples= SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

Sample Log

Date:

1/5/21

Project: CWMS Release

Project Number: 13296

Latitude:

Longitude:

Sample ID	PID/Odor	Chloride Conc.	GPS
FL 167 @ 4'	—	120	
FL 168 @ 4'	—	148	
FL 169 @ 4'	—	120	
FL 170 @ 4'	—	120	
FL 171 @ 4'	—	268	
FL 172 @ 4'	—	812	
FL 173 @ 4'	—	5452	
FL 174 @ 4'	—	812	
FL 175 @ 4'	—	184	
FL 176 @ 3'	—	748	
FL 177 @ 4'	—	1740	
FL 178 @ 4'	—	2352	
FL 179 @ 4'	—	1340	
FL 180 @ 3'	—	268	
FL 181 @ 3'	—	120	
FL 182 @ 3'	—	120	
FL 183 @ 4'	—	572	
FL 184 @ 4'	—	364	
FL 185 @ 4'	—	1092	
FL 186 @ 3'	—	148	
FL 187 @ 3'	—	ND	
FL 188 @ 4'	—	1740	
FL 189 @ 4'	—	4276	
FL 190 @ 4'	—	2808	
FL 191 @ 4'	—	184	
FL 192 @ 4'	—	8892	
FL 193 @ 4'	—	3936	
FL 194 @ 4'	—	3064	
FL 195 @ 4'	—	4636	
FL 196 @ 4'	—	572	
FL 197 @ 4'	—	2144	
FL 198 @ 4'	—	3624	
FL 199 @ 4'	—	364	
FL 200 @ 4'	—	3936	
FL 201 @ 4'	—	572	
FL 202 @ 4'	—	1252	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples = SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

Sample Log

Date:

$$\underline{1/5/2}$$

Project: CWMS Release

Project Number: 13296

Latitude:

Longitude:

[illegible]

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples= SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas



Soil Profile

Date: 11/9/20

Project: Road Water Management System Re
Project Number: 13296 Latitude: 32.261438 Longitude: -104.163478

Depth (ft. bgs)	Top Soil	Description
1	0-2'	Alkaline, Caliche mix
2	2-3'	Caliche
3	4-5'	Caliche-Topsoil
4		
5		
6		
7		
8		
9		
10		
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Appendix B

Laboratory Analytical Reports



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

November 17, 2020

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX:

RE: CWMS Release

OrderNo.: 2011574

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 16 sample(s) on 11/11/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: TT1 @ Surface

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-001

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	19000	1500		mg/Kg	500	11/16/2020 3:06:42 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/12/2020 11:22:47 PM	56378
Surr: BFB	99.7	70-130		%Rec	1	11/12/2020 11:22:47 PM	56378
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	660	98		mg/Kg	10	11/12/2020 11:52:07 PM	56379
Motor Oil Range Organics (MRO)	630	490		mg/Kg	10	11/12/2020 11:52:07 PM	56379
Surr: DNOP	0	30.4-154	S	%Rec	10	11/12/2020 11:52:07 PM	56379
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	11/12/2020 11:22:47 PM	56378
Toluene	ND	0.046		mg/Kg	1	11/12/2020 11:22:47 PM	56378
Ethylbenzene	ND	0.046		mg/Kg	1	11/12/2020 11:22:47 PM	56378
Xylenes, Total	ND	0.092		mg/Kg	1	11/12/2020 11:22:47 PM	56378
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%Rec	1	11/12/2020 11:22:47 PM	56378
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/12/2020 11:22:47 PM	56378
Surr: Dibromofluoromethane	104	70-130		%Rec	1	11/12/2020 11:22:47 PM	56378
Surr: Toluene-d8	91.3	70-130		%Rec	1	11/12/2020 11:22:47 PM	56378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 23

Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: TT1 @ 11'

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-002

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	440	60		mg/Kg	20	11/14/2020 10:16:45 AM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/12/2020 11:49:56 PM	56378
Surr: BFB	104	70-130		%Rec	1	11/12/2020 11:49:56 PM	56378
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/13/2020 12:15:23 AM	56379
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/13/2020 12:15:23 AM	56379
Surr: DNOP	97.1	30.4-154		%Rec	1	11/13/2020 12:15:23 AM	56379
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	11/12/2020 11:49:56 PM	56378
Toluene	ND	0.046		mg/Kg	1	11/12/2020 11:49:56 PM	56378
Ethylbenzene	ND	0.046		mg/Kg	1	11/12/2020 11:49:56 PM	56378
Xylenes, Total	ND	0.093		mg/Kg	1	11/12/2020 11:49:56 PM	56378
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%Rec	1	11/12/2020 11:49:56 PM	56378
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	11/12/2020 11:49:56 PM	56378
Surr: Dibromofluoromethane	103	70-130		%Rec	1	11/12/2020 11:49:56 PM	56378
Surr: Toluene-d8	90.5	70-130		%Rec	1	11/12/2020 11:49:56 PM	56378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: TT2 @ Surface

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-003

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	23000	1500		mg/Kg	500	11/16/2020 3:19:06 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/13/2020 12:17:06 AM	56378
Surr: BFB	101	70-130		%Rec	1	11/13/2020 12:17:06 AM	56378
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	16	9.9		mg/Kg	1	11/13/2020 12:38:37 AM	56379
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/13/2020 12:38:37 AM	56379
Surr: DNOP	98.0	30.4-154		%Rec	1	11/13/2020 12:38:37 AM	56379
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/13/2020 12:17:06 AM	56378
Toluene	ND	0.049		mg/Kg	1	11/13/2020 12:17:06 AM	56378
Ethylbenzene	ND	0.049		mg/Kg	1	11/13/2020 12:17:06 AM	56378
Xylenes, Total	ND	0.099		mg/Kg	1	11/13/2020 12:17:06 AM	56378
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%Rec	1	11/13/2020 12:17:06 AM	56378
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/13/2020 12:17:06 AM	56378
Surr: Dibromofluoromethane	101	70-130		%Rec	1	11/13/2020 12:17:06 AM	56378
Surr: Toluene-d8	89.7	70-130		%Rec	1	11/13/2020 12:17:06 AM	56378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: TT2 @ 6'

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-004

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	160	60		mg/Kg	20	11/14/2020 11:06:08 AM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/13/2020 3:26:48 AM	56378
Surr: BFB	94.9	70-130		%Rec	1	11/13/2020 3:26:48 AM	56378
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	11/13/2020 1:02:01 AM	56379
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/13/2020 1:02:01 AM	56379
Surr: DNOP	101	30.4-154		%Rec	1	11/13/2020 1:02:01 AM	56379
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	11/13/2020 3:26:48 AM	56378
Toluene	ND	0.047		mg/Kg	1	11/13/2020 3:26:48 AM	56378
Ethylbenzene	ND	0.047		mg/Kg	1	11/13/2020 3:26:48 AM	56378
Xylenes, Total	ND	0.093		mg/Kg	1	11/13/2020 3:26:48 AM	56378
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%Rec	1	11/13/2020 3:26:48 AM	56378
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	11/13/2020 3:26:48 AM	56378
Surr: Dibromofluoromethane	107	70-130		%Rec	1	11/13/2020 3:26:48 AM	56378
Surr: Toluene-d8	88.0	70-130		%Rec	1	11/13/2020 3:26:48 AM	56378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: TT3 @ Surface

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-005

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	30000	1500		mg/Kg	500	11/16/2020 3:31:30 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/13/2020 3:53:53 AM	56378
Surr: BFB	100	70-130		%Rec	1	11/13/2020 3:53:53 AM	56378
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	780	9.5		mg/Kg	1	11/13/2020 1:25:18 AM	56379
Motor Oil Range Organics (MRO)	440	47		mg/Kg	1	11/13/2020 1:25:18 AM	56379
Surr: DNOP	109	30.4-154		%Rec	1	11/13/2020 1:25:18 AM	56379
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	11/13/2020 3:53:53 AM	56378
Toluene	ND	0.049		mg/Kg	1	11/13/2020 3:53:53 AM	56378
Ethylbenzene	ND	0.049		mg/Kg	1	11/13/2020 3:53:53 AM	56378
Xylenes, Total	ND	0.098		mg/Kg	1	11/13/2020 3:53:53 AM	56378
Surr: 1,2-Dichloroethane-d4	93.8	70-130		%Rec	1	11/13/2020 3:53:53 AM	56378
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	11/13/2020 3:53:53 AM	56378
Surr: Dibromofluoromethane	106	70-130		%Rec	1	11/13/2020 3:53:53 AM	56378
Surr: Toluene-d8	87.7	70-130		%Rec	1	11/13/2020 3:53:53 AM	56378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: TT3 @ 6'

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-006

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	11/14/2020 11:55:31 AM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/13/2020 4:20:58 AM	56378
Surr: BFB	99.8	70-130		%Rec	1	11/13/2020 4:20:58 AM	56378
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/13/2020 1:48:32 AM	56379
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/13/2020 1:48:32 AM	56379
Surr: DNOP	111	30.4-154		%Rec	1	11/13/2020 1:48:32 AM	56379
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	11/13/2020 4:20:58 AM	56378
Toluene	ND	0.048		mg/Kg	1	11/13/2020 4:20:58 AM	56378
Ethylbenzene	ND	0.048		mg/Kg	1	11/13/2020 4:20:58 AM	56378
Xylenes, Total	ND	0.096		mg/Kg	1	11/13/2020 4:20:58 AM	56378
Surr: 1,2-Dichloroethane-d4	93.0	70-130		%Rec	1	11/13/2020 4:20:58 AM	56378
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	11/13/2020 4:20:58 AM	56378
Surr: Dibromofluoromethane	105	70-130		%Rec	1	11/13/2020 4:20:58 AM	56378
Surr: Toluene-d8	89.4	70-130		%Rec	1	11/13/2020 4:20:58 AM	56378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: TT4 @ Surface

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-007

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	27000	1500		mg/Kg	500	11/16/2020 3:43:55 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	6.8	4.9		mg/Kg	1	11/13/2020 3:13:40 AM	56381
Surr: BFB	102	70-130		%Rec	1	11/13/2020 3:13:40 AM	56381
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	34	9.5		mg/Kg	1	11/13/2020 5:37:32 AM	56385
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/13/2020 5:37:32 AM	56385
Surr: DNOP	92.1	30.4-154		%Rec	1	11/13/2020 5:37:32 AM	56385
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/13/2020 3:13:40 AM	56381
Toluene	ND	0.049		mg/Kg	1	11/13/2020 3:13:40 AM	56381
Ethylbenzene	ND	0.049		mg/Kg	1	11/13/2020 3:13:40 AM	56381
Xylenes, Total	ND	0.099		mg/Kg	1	11/13/2020 3:13:40 AM	56381
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	11/13/2020 3:13:40 AM	56381
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	11/13/2020 3:13:40 AM	56381
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/13/2020 3:13:40 AM	56381
Surr: Toluene-d8	98.1	70-130		%Rec	1	11/13/2020 3:13:40 AM	56381

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: TT4 @ 7'

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-008

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	200	60		mg/Kg	20	11/14/2020 12:20:12 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/13/2020 4:38:44 AM	56381
Surr: BFB	102	70-130		%Rec	1	11/13/2020 4:38:44 AM	56381
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/13/2020 7:13:32 AM	56385
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/13/2020 7:13:32 AM	56385
Surr: DNOP	91.7	30.4-154		%Rec	1	11/13/2020 7:13:32 AM	56385
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/13/2020 4:38:44 AM	56381
Toluene	ND	0.050		mg/Kg	1	11/13/2020 4:38:44 AM	56381
Ethylbenzene	ND	0.050		mg/Kg	1	11/13/2020 4:38:44 AM	56381
Xylenes, Total	ND	0.10		mg/Kg	1	11/13/2020 4:38:44 AM	56381
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	11/13/2020 4:38:44 AM	56381
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	11/13/2020 4:38:44 AM	56381
Surr: Dibromofluoromethane	106	70-130		%Rec	1	11/13/2020 4:38:44 AM	56381
Surr: Toluene-d8	105	70-130		%Rec	1	11/13/2020 4:38:44 AM	56381

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: TT5 @ Surface

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-009

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	30000	1500		mg/Kg	500	11/16/2020 4:21:07 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/13/2020 6:03:53 AM	56381
Surr: BFB	107	70-130		%Rec	1	11/13/2020 6:03:53 AM	56381
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	9.7	9.6		mg/Kg	1	11/13/2020 7:37:38 AM	56385
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/13/2020 7:37:38 AM	56385
Surr: DNOP	107	30.4-154		%Rec	1	11/13/2020 7:37:38 AM	56385
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	11/13/2020 6:03:53 AM	56381
Toluene	ND	0.047		mg/Kg	1	11/13/2020 6:03:53 AM	56381
Ethylbenzene	ND	0.047		mg/Kg	1	11/13/2020 6:03:53 AM	56381
Xylenes, Total	ND	0.095		mg/Kg	1	11/13/2020 6:03:53 AM	56381
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	11/13/2020 6:03:53 AM	56381
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/13/2020 6:03:53 AM	56381
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/13/2020 6:03:53 AM	56381
Surr: Toluene-d8	104	70-130		%Rec	1	11/13/2020 6:03:53 AM	56381

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: TT5 @ 3'

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-010

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	230	60		mg/Kg	20	11/14/2020 12:44:56 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/13/2020 6:32:25 AM	56381
Surr: BFB	100	70-130		%Rec	1	11/13/2020 6:32:25 AM	56381
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/13/2020 8:01:21 AM	56385
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/13/2020 8:01:21 AM	56385
Surr: DNOP	84.3	30.4-154		%Rec	1	11/13/2020 8:01:21 AM	56385
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	11/13/2020 6:32:25 AM	56381
Toluene	ND	0.047		mg/Kg	1	11/13/2020 6:32:25 AM	56381
Ethylbenzene	ND	0.047		mg/Kg	1	11/13/2020 6:32:25 AM	56381
Xylenes, Total	ND	0.094		mg/Kg	1	11/13/2020 6:32:25 AM	56381
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	11/13/2020 6:32:25 AM	56381
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	11/13/2020 6:32:25 AM	56381
Surr: Dibromofluoromethane	119	70-130		%Rec	1	11/13/2020 6:32:25 AM	56381
Surr: Toluene-d8	99.2	70-130		%Rec	1	11/13/2020 6:32:25 AM	56381

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SH1 @ 2.5'

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-011

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	74	60		mg/Kg	20	11/14/2020 12:57:17 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/13/2020 11:21:11 AM	56381
Surr: BFB	97.0	70-130		%Rec	1	11/13/2020 11:21:11 AM	56381
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/13/2020 8:25:15 AM	56385
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/13/2020 8:25:15 AM	56385
Surr: DNOP	81.7	30.4-154		%Rec	1	11/13/2020 8:25:15 AM	56385
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	11/13/2020 11:21:11 AM	56381
Toluene	ND	0.047		mg/Kg	1	11/13/2020 11:21:11 AM	56381
Ethylbenzene	ND	0.047		mg/Kg	1	11/13/2020 11:21:11 AM	56381
Xylenes, Total	ND	0.094		mg/Kg	1	11/13/2020 11:21:11 AM	56381
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	11/13/2020 11:21:11 AM	56381
Surr: 4-Bromofluorobenzene	95.2	70-130		%Rec	1	11/13/2020 11:21:11 AM	56381
Surr: Dibromofluoromethane	118	70-130		%Rec	1	11/13/2020 11:21:11 AM	56381
Surr: Toluene-d8	97.8	70-130		%Rec	1	11/13/2020 11:21:11 AM	56381

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NH1 @ 2.5'

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-012

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	11/14/2020 1:09:38 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/13/2020 11:49:32 AM	56381
Surr: BFB	102	70-130		%Rec	1	11/13/2020 11:49:32 AM	56381
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/13/2020 8:49:07 AM	56385
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/13/2020 8:49:07 AM	56385
Surr: DNOP	63.0	30.4-154		%Rec	1	11/13/2020 8:49:07 AM	56385
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	11/13/2020 11:49:32 AM	56381
Toluene	ND	0.047		mg/Kg	1	11/13/2020 11:49:32 AM	56381
Ethylbenzene	ND	0.047		mg/Kg	1	11/13/2020 11:49:32 AM	56381
Xylenes, Total	ND	0.095		mg/Kg	1	11/13/2020 11:49:32 AM	56381
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	11/13/2020 11:49:32 AM	56381
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	11/13/2020 11:49:32 AM	56381
Surr: Dibromofluoromethane	106	70-130		%Rec	1	11/13/2020 11:49:32 AM	56381
Surr: Toluene-d8	95.1	70-130		%Rec	1	11/13/2020 11:49:32 AM	56381

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EH1 @ 2.5'

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-013

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	11/14/2020 1:21:58 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/13/2020 12:17:58 PM	56381
Surr: BFB	100	70-130		%Rec	1	11/13/2020 12:17:58 PM	56381
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/13/2020 9:13:06 AM	56385
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/13/2020 9:13:06 AM	56385
Surr: DNOP	39.4	30.4-154		%Rec	1	11/13/2020 9:13:06 AM	56385
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/13/2020 12:17:58 PM	56381
Toluene	ND	0.050		mg/Kg	1	11/13/2020 12:17:58 PM	56381
Ethylbenzene	ND	0.050		mg/Kg	1	11/13/2020 12:17:58 PM	56381
Xylenes, Total	ND	0.10		mg/Kg	1	11/13/2020 12:17:58 PM	56381
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	11/13/2020 12:17:58 PM	56381
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	11/13/2020 12:17:58 PM	56381
Surr: Dibromofluoromethane	110	70-130		%Rec	1	11/13/2020 12:17:58 PM	56381
Surr: Toluene-d8	102	70-130		%Rec	1	11/13/2020 12:17:58 PM	56381

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EH2 @ 2.5'

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-014

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	11/14/2020 1:34:19 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/13/2020 12:46:25 PM	56381
Surr: BFB	101	70-130		%Rec	1	11/13/2020 12:46:25 PM	56381
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/13/2020 9:37:03 AM	56385
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/13/2020 9:37:03 AM	56385
Surr: DNOP	50.5	30.4-154		%Rec	1	11/13/2020 9:37:03 AM	56385
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	11/13/2020 12:46:25 PM	56381
Toluene	ND	0.049		mg/Kg	1	11/13/2020 12:46:25 PM	56381
Ethylbenzene	ND	0.049		mg/Kg	1	11/13/2020 12:46:25 PM	56381
Xylenes, Total	ND	0.098		mg/Kg	1	11/13/2020 12:46:25 PM	56381
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	11/13/2020 12:46:25 PM	56381
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	11/13/2020 12:46:25 PM	56381
Surr: Dibromofluoromethane	107	70-130		%Rec	1	11/13/2020 12:46:25 PM	56381
Surr: Toluene-d8	102	70-130		%Rec	1	11/13/2020 12:46:25 PM	56381

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WH1 @ 2.5'

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-015

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	63	60		mg/Kg	20	11/14/2020 2:11:21 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/13/2020 1:14:55 PM	56381
Surr: BFB	104	70-130		%Rec	1	11/13/2020 1:14:55 PM	56381
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/13/2020 10:00:58 AM	56385
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/13/2020 10:00:58 AM	56385
Surr: DNOP	37.8	30.4-154		%Rec	1	11/13/2020 10:00:58 AM	56385
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	11/13/2020 1:14:55 PM	56381
Toluene	ND	0.049		mg/Kg	1	11/13/2020 1:14:55 PM	56381
Ethylbenzene	ND	0.049		mg/Kg	1	11/13/2020 1:14:55 PM	56381
Xylenes, Total	ND	0.098		mg/Kg	1	11/13/2020 1:14:55 PM	56381
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	11/13/2020 1:14:55 PM	56381
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	11/13/2020 1:14:55 PM	56381
Surr: Dibromofluoromethane	111	70-130		%Rec	1	11/13/2020 1:14:55 PM	56381
Surr: Toluene-d8	102	70-130		%Rec	1	11/13/2020 1:14:55 PM	56381

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011574

Date Reported: 11/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WH2 @ 2.5'

Project: CWMS Release

Collection Date: 11/9/2020

Lab ID: 2011574-016

Matrix: SOIL

Received Date: 11/11/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	11/14/2020 2:23:41 PM	56440
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/13/2020 1:43:33 PM	56381
Surr: BFB	102	70-130		%Rec	1	11/13/2020 1:43:33 PM	56381
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/13/2020 10:24:49 AM	56385
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/13/2020 10:24:49 AM	56385
Surr: DNOP	29.6	30.4-154	S	%Rec	1	11/13/2020 10:24:49 AM	56385
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	11/13/2020 1:43:33 PM	56381
Toluene	ND	0.046		mg/Kg	1	11/13/2020 1:43:33 PM	56381
Ethylbenzene	ND	0.046		mg/Kg	1	11/13/2020 1:43:33 PM	56381
Xylenes, Total	ND	0.092		mg/Kg	1	11/13/2020 1:43:33 PM	56381
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	11/13/2020 1:43:33 PM	56381
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	11/13/2020 1:43:33 PM	56381
Surr: Dibromofluoromethane	111	70-130		%Rec	1	11/13/2020 1:43:33 PM	56381
Surr: Toluene-d8	97.3	70-130		%Rec	1	11/13/2020 1:43:33 PM	56381

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011574

17-Nov-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-56440	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56440	RunNo: 73376								
Prep Date: 11/14/2020	Analysis Date: 11/14/2020	SeqNo: 2583230	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56440	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56440	RunNo: 73376								
Prep Date: 11/14/2020	Analysis Date: 11/14/2020	SeqNo: 2583240	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.3	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011574

17-Nov-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-56364	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 56364			RunNo: 73311						
Prep Date: 11/11/2020	Analysis Date: 11/12/2020			SeqNo: 2580072	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		107	30.4	154			

Sample ID: LCS-56364	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 56364			RunNo: 73311						
Prep Date: 11/11/2020	Analysis Date: 11/12/2020			SeqNo: 2580073	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.2		5.000		104	30.4	154			

Sample ID: MB-56379	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 56379			RunNo: 73311						
Prep Date: 11/11/2020	Analysis Date: 11/12/2020			SeqNo: 2580174	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		125	30.4	154			

Sample ID: LCS-56379	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 56379			RunNo: 73311						
Prep Date: 11/11/2020	Analysis Date: 11/12/2020			SeqNo: 2580184	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.3	70	130			
Surr: DNOP	5.3		5.000		106	30.4	154			

Sample ID: 2011574-007AMS	SampType: MS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: TT4 @ Surface	Batch ID: 56385			RunNo: 73324						
Prep Date: 11/11/2020	Analysis Date: 11/13/2020			SeqNo: 2580666	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	89	9.7	48.69	33.96	112	15	184			
Surr: DNOP	13		14.61		90.1	30.4	154			

Sample ID: 2011574-007AMSD	SampType: MSD			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: TT4 @ Surface	Batch ID: 56385			RunNo: 73324						
Prep Date: 11/11/2020	Analysis Date: 11/13/2020			SeqNo: 2580667	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	9.8	48.88	33.96	44.7	15	184	45.4	23.9	R

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011574

17-Nov-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: 2011574-007AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: TT4 @ Surface	Batch ID: 56385	RunNo: 73324								
Prep Date: 11/11/2020	Analysis Date: 11/13/2020	SeqNo: 2580667	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	14		14.66		95.6	30.4	154	0	0	

Sample ID: LCS-56385	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 56385	RunNo: 73324								
Prep Date: 11/11/2020	Analysis Date: 11/13/2020	SeqNo: 2580726	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.4	70	130			
Surr: DNOP	3.3		5.000		66.5	30.4	154			

Sample ID: MB-56385	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 56385	RunNo: 73324								
Prep Date: 11/11/2020	Analysis Date: 11/13/2020	SeqNo: 2580730	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.4	30.4	154			

Sample ID: MB-56424	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 56424	RunNo: 73324								
Prep Date: 11/13/2020	Analysis Date: 11/14/2020	SeqNo: 2582778	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	0		10.00		0	30.4	154			S

Sample ID: LCS-56424	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 56424	RunNo: 73324								
Prep Date: 11/13/2020	Analysis Date: 11/14/2020	SeqNo: 2582780	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	0		5.000		0	30.4	154			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011574

17-Nov-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-56381	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 56381	RunNo: 73317								
Prep Date: 11/11/2020	Analysis Date: 11/13/2020	SeqNo: 2580507	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		107	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.3	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			

Sample ID: lcs-56381	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 56381	RunNo: 73317								
Prep Date: 11/11/2020	Analysis Date: 11/13/2020	SeqNo: 2580521	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.1	0.050	1.000	0	107	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		107	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.8	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.49		0.5000		98.5	70	130			

Sample ID: 2011574-008ams	SampType: MS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: TT4 @ 7'	Batch ID: 56381	RunNo: 73317								
Prep Date: 11/11/2020	Analysis Date: 11/13/2020	SeqNo: 2580538	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.023	0.9381	0	110	71.1	115			
Toluene	1.1	0.047	0.9381	0	117	79.6	132			
Ethylbenzene	1.1	0.047	0.9381	0	119	83.8	134			
Xylenes, Total	3.6	0.094	2.814	0	127	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.48		0.4690		103	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.4690		96.5	70	130			
Surr: Dibromofluoromethane	0.50		0.4690		106	70	130			
Surr: Toluene-d8	0.47		0.4690		100	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011574

17-Nov-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: 2011574-008amsd	SampType: MSD4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: TT4 @ 7'	Batch ID: 56381	RunNo: 73317								
Prep Date: 11/11/2020	Analysis Date: 11/13/2020	SeqNo: 2580543	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9690	0	110	71.1	115	0	20	
Toluene	1.1	0.048	0.9690	0	114	79.6	132	0	20	
Ethylbenzene	1.1	0.048	0.9690	0	114	83.8	134	0	20	
Xylenes, Total	3.5	0.097	2.907	0	121	82.4	132	0	20	
Surr: 1,2-Dichloroethane-d4	0.53		0.4845		109	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.47		0.4845		96.9	70	130	0	0	
Surr: Dibromofluoromethane	0.52		0.4845		107	70	130	0	0	
Surr: Toluene-d8	0.49		0.4845		101	70	130	0	0	

Sample ID: mb-56378	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 56378	RunNo: 73322								
Prep Date: 11/11/2020	Analysis Date: 11/12/2020	SeqNo: 2580606	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.7	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.47		0.5000		94.1	70	130			

Sample ID: lcs-56378	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 56378	RunNo: 73322								
Prep Date: 11/11/2020	Analysis Date: 11/12/2020	SeqNo: 2580607	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	107	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.3	80	120			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.9	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130			
Surr: Toluene-d8	0.47		0.5000		93.5	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011574

17-Nov-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: Ics-56381	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 56381	RunNo: 73317								
Prep Date: 11/11/2020	Analysis Date: 11/12/2020	SeqNo: 2580574 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.7	70	130			
Surr: BFB	520		500.0		104	70	130			

Sample ID: 2011574-007ams	SampType: MS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: TT4 @ Surface	Batch ID: 56381	RunNo: 73317								
Prep Date: 11/11/2020	Analysis Date: 11/13/2020	SeqNo: 2580576 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.7	23.58	6.844	93.3	49.2	122			
Surr: BFB	470		471.7		101	70	130			

Sample ID: 2011574-007amsd	SampType: MSD	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: TT4 @ Surface	Batch ID: 56381	RunNo: 73317								
Prep Date: 11/11/2020	Analysis Date: 11/13/2020	SeqNo: 2580577 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	35	4.8	23.97	6.844	116	49.2	122	18.6	20	
Surr: BFB	510		479.4		106	70	130	0	0	

Sample ID: mb-56381	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 56381	RunNo: 73317								
Prep Date: 11/11/2020	Analysis Date: 11/13/2020	SeqNo: 2580581 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	520		500.0		104	70	130			

Sample ID: mb-56378	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 56378	RunNo: 73322								
Prep Date: 11/11/2020	Analysis Date: 11/12/2020	SeqNo: 2580707 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		101	70	130			

Sample ID: Ics-56378	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 56378	RunNo: 73322								
Prep Date: 11/11/2020	Analysis Date: 11/12/2020	SeqNo: 2580722 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2011574

17-Nov-20

Client: Mewbourne Oil Company

Project: CWMS Release

Sample ID: Ics-56378		SampType: LCS		TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS		Batch ID: 56378		RunNo: 73322						
Prep Date: 11/11/2020		Analysis Date: 11/12/2020		SeqNo: 2580722		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	81.4	70	130			
Surr: BFB	500		500.0		100	70	130			

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

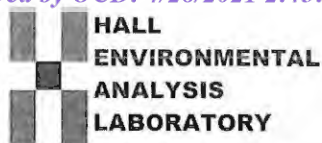
Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2011574

RcptNo: 1

Received By: Juan Rojas

11/11/2020 8:50:00 AM

Completed By: Emily Mocho

11/11/2020 9:27:15 AM

Reviewed By: *Cue*

11/11/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: JR 11/11/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

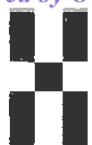
Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			
2	2.3	Good	Yes			
3	3.6	Good	Yes			
4	1.3	Good	Yes			



**HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY**

*Hall Environmental Analysis Laboratory
1901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: chems.hallenvironmental.com*

Sample Log-In Check List

Client Name: **Mewbourne Oil Company**

Work Order Number: **2011574**

RcptNo: 1

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
5	3.7	Good	Yes			

Released to Imaging: 8/23/2021 11:37:48 AM

☐ EDD (Type) _____

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

November 25, 2020

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX

RE: CWMs Release

OrderNo.: 2011887

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 14 sample(s) on 11/18/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 1

Project: CWMs Release

Collection Date: 11/10/2020

Lab ID: 2011887-001

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	11/23/2020 8:24:06 PM	56600
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/21/2020 11:58:42 AM	56575
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/21/2020 11:58:42 AM	56575
Surr: DNOP	110	30.4-154		%Rec	1	11/21/2020 11:58:42 AM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/23/2020 9:56:18 AM	56571
Surr: BFB	89.3	75.3-105		%Rec	1	11/23/2020 9:56:18 AM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/23/2020 9:56:18 AM	56571
Toluene	ND	0.050		mg/Kg	1	11/23/2020 9:56:18 AM	56571
Ethylbenzene	ND	0.050		mg/Kg	1	11/23/2020 9:56:18 AM	56571
Xylenes, Total	ND	0.099		mg/Kg	1	11/23/2020 9:56:18 AM	56571
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	1	11/23/2020 9:56:18 AM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 18

Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 2

Project: CWMs Release

Collection Date: 11/10/2020

Lab ID: 2011887-002

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1600	61		mg/Kg	20	11/23/2020 9:01:20 PM	56600
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/21/2020 12:27:47 PM	56575
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/21/2020 12:27:47 PM	56575
Surr: DNOP	102	30.4-154		%Rec	1	11/21/2020 12:27:47 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/23/2020 11:06:36 AM	56571
Surr: BFB	91.5	75.3-105		%Rec	1	11/23/2020 11:06:36 AM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	11/23/2020 11:06:36 AM	56571
Toluene	ND	0.049		mg/Kg	1	11/23/2020 11:06:36 AM	56571
Ethylbenzene	ND	0.049		mg/Kg	1	11/23/2020 11:06:36 AM	56571
Xylenes, Total	ND	0.098		mg/Kg	1	11/23/2020 11:06:36 AM	56571
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	11/23/2020 11:06:36 AM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 3

Project: CWMs Release

Collection Date: 11/10/2020

Lab ID: 2011887-003

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	310	60		mg/Kg	20	11/23/2020 9:13:45 PM	56600
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/21/2020 12:37:31 PM	56575
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/21/2020 12:37:31 PM	56575
Surr: DNOP	94.6	30.4-154		%Rec	1	11/21/2020 12:37:31 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/23/2020 12:17:25 PM	56571
Surr: BFB	90.4	75.3-105		%Rec	1	11/23/2020 12:17:25 PM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/23/2020 12:17:25 PM	56571
Toluene	ND	0.050		mg/Kg	1	11/23/2020 12:17:25 PM	56571
Ethylbenzene	ND	0.050		mg/Kg	1	11/23/2020 12:17:25 PM	56571
Xylenes, Total	ND	0.10		mg/Kg	1	11/23/2020 12:17:25 PM	56571
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	11/23/2020 12:17:25 PM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 5

Project: CWMs Release

Collection Date: 11/10/2020

Lab ID: 2011887-004

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	71	59		mg/Kg	20	11/23/2020 9:26:09 PM	56600
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/21/2020 12:47:18 PM	56575
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/21/2020 12:47:18 PM	56575
Surr: DNOP	102	30.4-154		%Rec	1	11/21/2020 12:47:18 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/23/2020 12:40:53 PM	56571
Surr: BFB	90.6	75.3-105		%Rec	1	11/23/2020 12:40:53 PM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/23/2020 12:40:53 PM	56571
Toluene	ND	0.049		mg/Kg	1	11/23/2020 12:40:53 PM	56571
Ethylbenzene	ND	0.049		mg/Kg	1	11/23/2020 12:40:53 PM	56571
Xylenes, Total	ND	0.099		mg/Kg	1	11/23/2020 12:40:53 PM	56571
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	11/23/2020 12:40:53 PM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 6

Project: CWMs Release

Collection Date: 11/10/2020

Lab ID: 2011887-005

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	11/23/2020 9:38:34 PM	56600
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/21/2020 12:57:07 PM	56575
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/21/2020 12:57:07 PM	56575
Surr: DNOP	102	30.4-154		%Rec	1	11/21/2020 12:57:07 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/23/2020 1:04:24 PM	56571
Surr: BFB	89.8	75.3-105		%Rec	1	11/23/2020 1:04:24 PM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/23/2020 1:04:24 PM	56571
Toluene	ND	0.050		mg/Kg	1	11/23/2020 1:04:24 PM	56571
Ethylbenzene	ND	0.050		mg/Kg	1	11/23/2020 1:04:24 PM	56571
Xylenes, Total	ND	0.10		mg/Kg	1	11/23/2020 1:04:24 PM	56571
Surr: 4-Bromofluorobenzene	98.2	80-120		%Rec	1	11/23/2020 1:04:24 PM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 7

Project: CWMs Release

Collection Date: 11/10/2020

Lab ID: 2011887-006

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	11/23/2020 9:50:58 PM	56600
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/21/2020 1:06:58 PM	56575
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/21/2020 1:06:58 PM	56575
Surr: DNOP	110	30.4-154		%Rec	1	11/21/2020 1:06:58 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/23/2020 1:28:05 PM	56571
Surr: BFB	90.4	75.3-105		%Rec	1	11/23/2020 1:28:05 PM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/23/2020 1:28:05 PM	56571
Toluene	ND	0.050		mg/Kg	1	11/23/2020 1:28:05 PM	56571
Ethylbenzene	ND	0.050		mg/Kg	1	11/23/2020 1:28:05 PM	56571
Xylenes, Total	ND	0.10		mg/Kg	1	11/23/2020 1:28:05 PM	56571
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	11/23/2020 1:28:05 PM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 9

Project: CWMs Release

Collection Date: 11/10/2020

Lab ID: 2011887-007

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	84	59		mg/Kg	20	11/23/2020 10:28:11 PM	56600
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/21/2020 1:16:58 PM	56575
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/21/2020 1:16:58 PM	56575
Surr: DNOP	99.9	30.4-154		%Rec	1	11/21/2020 1:16:58 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/23/2020 1:51:47 PM	56571
Surr: BFB	90.8	75.3-105		%Rec	1	11/23/2020 1:51:47 PM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/23/2020 1:51:47 PM	56571
Toluene	ND	0.049		mg/Kg	1	11/23/2020 1:51:47 PM	56571
Ethylbenzene	ND	0.049		mg/Kg	1	11/23/2020 1:51:47 PM	56571
Xylenes, Total	ND	0.098		mg/Kg	1	11/23/2020 1:51:47 PM	56571
Surr: 4-Bromofluorobenzene	99.2	80-120		%Rec	1	11/23/2020 1:51:47 PM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW4 E

Project: CWMs Release

Collection Date: 11/11/2020

Lab ID: 2011887-008

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	11/23/2020 10:40:35 PM	56600
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/21/2020 1:26:58 PM	56575
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/21/2020 1:26:58 PM	56575
Surr: DNOP	96.4	30.4-154		%Rec	1	11/21/2020 1:26:58 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/23/2020 2:15:27 PM	56571
Surr: BFB	89.4	75.3-105		%Rec	1	11/23/2020 2:15:27 PM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	11/23/2020 2:15:27 PM	56571
Toluene	ND	0.049		mg/Kg	1	11/23/2020 2:15:27 PM	56571
Ethylbenzene	ND	0.049		mg/Kg	1	11/23/2020 2:15:27 PM	56571
Xylenes, Total	ND	0.097		mg/Kg	1	11/23/2020 2:15:27 PM	56571
Surr: 4-Bromofluorobenzene	97.0	80-120		%Rec	1	11/23/2020 2:15:27 PM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW8 B

Project: CWMs Release

Collection Date: 11/11/2020

Lab ID: 2011887-009

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	180	60		mg/Kg	20	11/24/2020 2:36:55 PM	56623
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/21/2020 1:36:59 PM	56575
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/21/2020 1:36:59 PM	56575
Surr: DNOP	77.0	30.4-154		%Rec	1	11/21/2020 1:36:59 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/23/2020 2:38:50 PM	56571
Surr: BFB	90.1	75.3-105		%Rec	1	11/23/2020 2:38:50 PM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/23/2020 2:38:50 PM	56571
Toluene	ND	0.049		mg/Kg	1	11/23/2020 2:38:50 PM	56571
Ethylbenzene	ND	0.049		mg/Kg	1	11/23/2020 2:38:50 PM	56571
Xylenes, Total	ND	0.099		mg/Kg	1	11/23/2020 2:38:50 PM	56571
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	11/23/2020 2:38:50 PM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 1 C

Project: CWMs Release

Collection Date: 11/12/2020

Lab ID: 2011887-010

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	11/24/2020 2:49:20 PM	56623
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/21/2020 1:47:00 PM	56575
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/21/2020 1:47:00 PM	56575
Surr: DNOP	81.3	30.4-154		%Rec	1	11/21/2020 1:47:00 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/23/2020 3:02:09 PM	56571
Surr: BFB	95.3	75.3-105		%Rec	1	11/23/2020 3:02:09 PM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/23/2020 3:02:09 PM	56571
Toluene	ND	0.049		mg/Kg	1	11/23/2020 3:02:09 PM	56571
Ethylbenzene	ND	0.049		mg/Kg	1	11/23/2020 3:02:09 PM	56571
Xylenes, Total	ND	0.099		mg/Kg	1	11/23/2020 3:02:09 PM	56571
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	11/23/2020 3:02:09 PM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 2

Project: CWMs Release

Collection Date: 11/16/2020

Lab ID: 2011887-011

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	11/24/2020 3:26:35 PM	56623
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/21/2020 1:57:00 PM	56575
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/21/2020 1:57:00 PM	56575
Surr: DNOP	90.9	30.4-154		%Rec	1	11/21/2020 1:57:00 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/23/2020 4:12:17 PM	56571
Surr: BFB	93.6	75.3-105		%Rec	1	11/23/2020 4:12:17 PM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/23/2020 4:12:17 PM	56571
Toluene	ND	0.050		mg/Kg	1	11/23/2020 4:12:17 PM	56571
Ethylbenzene	ND	0.050		mg/Kg	1	11/23/2020 4:12:17 PM	56571
Xylenes, Total	ND	0.10		mg/Kg	1	11/23/2020 4:12:17 PM	56571
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	11/23/2020 4:12:17 PM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 3

Project: CWMs Release

Collection Date: 11/16/2020

Lab ID: 2011887-012

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	61		mg/Kg	20	11/24/2020 3:38:59 PM	56623
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	11	9.4		mg/Kg	1	11/21/2020 2:07:01 PM	56575
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/21/2020 2:07:01 PM	56575
Surr: DNOP	94.9	30.4-154		%Rec	1	11/21/2020 2:07:01 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/23/2020 4:35:39 PM	56571
Surr: BFB	92.1	75.3-105		%Rec	1	11/23/2020 4:35:39 PM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/23/2020 4:35:39 PM	56571
Toluene	ND	0.049		mg/Kg	1	11/23/2020 4:35:39 PM	56571
Ethylbenzene	ND	0.049		mg/Kg	1	11/23/2020 4:35:39 PM	56571
Xylenes, Total	ND	0.099		mg/Kg	1	11/23/2020 4:35:39 PM	56571
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	11/23/2020 4:35:39 PM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 1 B

Project: CWMs Release

Collection Date: 11/16/2020

Lab ID: 2011887-013

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	11/24/2020 3:51:25 PM	56623
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/21/2020 2:17:02 PM	56575
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	11/21/2020 2:17:02 PM	56575
Surr: DNOP	95.0	30.4-154		%Rec	1	11/21/2020 2:17:02 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/23/2020 4:58:57 PM	56571
Surr: BFB	93.0	75.3-105		%Rec	1	11/23/2020 4:58:57 PM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/23/2020 4:58:57 PM	56571
Toluene	ND	0.049		mg/Kg	1	11/23/2020 4:58:57 PM	56571
Ethylbenzene	ND	0.049		mg/Kg	1	11/23/2020 4:58:57 PM	56571
Xylenes, Total	ND	0.098		mg/Kg	1	11/23/2020 4:58:57 PM	56571
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	11/23/2020 4:58:57 PM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011887

Date Reported: 11/25/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 2 B

Project: CWMs Release

Collection Date: 11/16/2020

Lab ID: 2011887-014

Matrix: SOIL

Received Date: 11/18/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	76	60		mg/Kg	20	11/24/2020 4:03:49 PM	56623
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/21/2020 2:27:03 PM	56575
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/21/2020 2:27:03 PM	56575
Surr: DNOP	89.7	30.4-154		%Rec	1	11/21/2020 2:27:03 PM	56575
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/23/2020 5:22:16 PM	56571
Surr: BFB	92.8	75.3-105		%Rec	1	11/23/2020 5:22:16 PM	56571
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/23/2020 5:22:16 PM	56571
Toluene	ND	0.049		mg/Kg	1	11/23/2020 5:22:16 PM	56571
Ethylbenzene	ND	0.049		mg/Kg	1	11/23/2020 5:22:16 PM	56571
Xylenes, Total	ND	0.099		mg/Kg	1	11/23/2020 5:22:16 PM	56571
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	11/23/2020 5:22:16 PM	56571

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011887

25-Nov-20

Client: Mewbourne Oil Company**Project:** CWMs Release

Sample ID: MB-56600	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56600	RunNo: 73569								
Prep Date: 11/23/2020	Analysis Date: 11/23/2020	SeqNo: 2591794	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56600	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56600	RunNo: 73569								
Prep Date: 11/23/2020	Analysis Date: 11/23/2020	SeqNo: 2591795	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.6	90	110			

Sample ID: MB-56623	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56623	RunNo: 73590								
Prep Date: 11/24/2020	Analysis Date: 11/24/2020	SeqNo: 2593314	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56623	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56623	RunNo: 73590								
Prep Date: 11/24/2020	Analysis Date: 11/24/2020	SeqNo: 2593315	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.8	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011887

25-Nov-20

Client: Mewbourne Oil Company**Project:** CWMs Release

Sample ID: MB-56575	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 56575	RunNo: 73544								
Prep Date: 11/20/2020	Analysis Date: 11/21/2020	SeqNo: 2590644 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		110	30.4	154			

Sample ID: LCS-56575	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 56575	RunNo: 73544								
Prep Date: 11/20/2020	Analysis Date: 11/21/2020	SeqNo: 2590647 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	10	50.00	0	118	70	130			
Surr: DNOP	5.0		5.000		101	30.4	154			

Sample ID: 2011887-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: EW 1	Batch ID: 56575	RunNo: 73544								
Prep Date: 11/20/2020	Analysis Date: 11/21/2020	SeqNo: 2590649 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	9.6	47.85	3.941	80.2	15	184			
Surr: DNOP	2.7		4.785		56.2	30.4	154			

Sample ID: 2011887-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: EW 1	Batch ID: 56575	RunNo: 73544								
Prep Date: 11/20/2020	Analysis Date: 11/21/2020	SeqNo: 2590651 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.9	49.36	3.941	84.9	15	184	8.08	23.9	
Surr: DNOP	3.4		4.936		68.8	30.4	154	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011887

25-Nov-20

Client: Mewbourne Oil Company**Project:** CWMs Release

Sample ID: mb-56571	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 56571	RunNo: 73565								
Prep Date: 11/20/2020	Analysis Date: 11/23/2020	SeqNo: 2591453			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		88.8	75.3	105			

Sample ID: lcs-56571	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 56571	RunNo: 73565								
Prep Date: 11/20/2020	Analysis Date: 11/23/2020	SeqNo: 2591454			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.5	72.5	106			
Surr: BFB	990		1000		99.2	75.3	105			

Sample ID: 2011887-002ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: EW 2	Batch ID: 56571	RunNo: 73565								
Prep Date: 11/20/2020	Analysis Date: 11/23/2020	SeqNo: 2591457			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	24.90	0	83.6	61.3	114			
Surr: BFB	1000		996.0		101	75.3	105			

Sample ID: 2011887-002amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: EW 2	Batch ID: 56571	RunNo: 73565								
Prep Date: 11/20/2020	Analysis Date: 11/23/2020	SeqNo: 2591458			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.78	0	88.2	61.3	114	4.81	20	
Surr: BFB	990		991.1		99.9	75.3	105	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011887

25-Nov-20

Client: Mewbourne Oil Company**Project:** CWMs Release

Sample ID: mb-56571	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 56571	RunNo: 73565								
Prep Date: 11/20/2020	Analysis Date: 11/23/2020	SeqNo: 2591494 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		98.2	80	120			

Sample ID: LCS-56571	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 56571	RunNo: 73565								
Prep Date: 11/20/2020	Analysis Date: 11/23/2020	SeqNo: 2591495 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.2	80	120			
Toluene	0.94	0.050	1.000	0	93.5	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.8	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.5	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: 2011887-001ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: EW 1	Batch ID: 56571	RunNo: 73565								
Prep Date: 11/20/2020	Analysis Date: 11/23/2020	SeqNo: 2591497 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	0.9990	0	89.3	76.3	120			
Toluene	0.94	0.050	0.9990	0	94.1	78.5	120			
Ethylbenzene	0.95	0.050	0.9990	0	94.9	78.1	124			
Xylenes, Total	2.9	0.10	2.997	0.01645	94.6	79.3	125			
Surr: 4-Bromofluorobenzene	0.98		0.9990		98.3	80	120			

Sample ID: 2011887-001amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: EW 1	Batch ID: 56571	RunNo: 73565								
Prep Date: 11/20/2020	Analysis Date: 11/23/2020	SeqNo: 2591498 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.024	0.9775	0	85.9	76.3	120	6.01	20	
Toluene	0.90	0.049	0.9775	0	92.3	78.5	120	4.08	20	
Ethylbenzene	0.91	0.049	0.9775	0	93.4	78.1	124	3.80	20	
Xylenes, Total	2.8	0.098	2.933	0.01645	93.5	79.3	125	3.35	20	
Surr: 4-Bromofluorobenzene	0.97		0.9775		98.8	80	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2011887

RcptNo: 1

Received By: Emily Mocho 11/18/2020 8:00:00 AM

Completed By: Emily Mocho 11/18/2020 9:06:03 AM

Reviewed By: SPA 11.18.20

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: YR 11/18/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.5	Good	Yes			
2	1.3	Good	Yes			

Analyze for 300 hold for 8021, 80LS

Turn-Around Time:

Client: Melbourne

☒ Standard☐ Rush

Project Name:

Mailing Address:

CWMS Release

Project #:

Phone #:

13296

email or Fax#:

Project Manager: Lance Crenshaw

QA/QC Package:

Joel Lowry

☒ Standard

☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

Sampler:

☐ NELAC ☐ Other

On Ice: ☒ Yes ☐ No

☐ EDD (Type)

of Coolers: 2

Cooler Temp (including CF): $0.5 \pm 0 = 0.5$ (°C)

Container Type and #	Material	Quantity	Weight	Volume	Notes
1
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Preservative
Type

1.320=1.3
HEAL No.
2011887

BTEX / MTBE / TMB's (8021)

TPH:8015D(GRO / DRO / MRO)

3081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

③ F, Br, NO₃, NO₂, PO₄, SO₄

3260 (VOA)

3270 (Semi-VOA)

Total Coliform (Present/Absent)

Analysis Request

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Newbourne

Mailing Address: _____

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: Solely Rush

☒ Standard ☐ Rush

Project Name:

CWMS Release

Project #: 13296

Project Manager: Lance Crenshaw
Joel Lowry

Sampler:

On Ice: ☒ Yes ☐ No

of Coolers: 2

Cooler Temp (including CF): $0.5 \pm 0 = 0.5$ ($^{\circ}\text{C}$)

Container Type and #	Preservative Type	HEAL No. 201821 70118
-------------------------	----------------------	-------------------------------------

Date	Time	Matrix	Sample Name
------	------	--------	-------------

11/16/20	Soil	WW1B
----------	------	------

4/16/20	Soil	WW 2 B
---------	------	--------

Date:	Time:	Relinquished by:
-------	-------	------------------

Date:	Time:	Relinquished by:
-------	-------	------------------

Received by: <i>[Signature]</i>	Via:	Date	Time
---------------------------------	------	------	------

Received by:	Via:	Date	Time
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HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

Remarks: seal intact
Email results to pm@etechnu.com Analyze For
300 ONLY
wild for TPA B



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

December 08, 2020

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX:

RE: CWMS Release

OrderNo.: 2011C97

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 22 sample(s) on 11/28/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 5B

Project: CWMS Release

Collection Date: 11/17/2020

Lab ID: 2011C97-001

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	67	59		mg/Kg	20	11/30/2020 11:26:32 PM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 5:28:53 AM	56681
Surr: BFB	92.9	70-130		%Rec	1	11/30/2020 5:28:53 AM	56681
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/30/2020 9:41:07 PM	56685
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/30/2020 9:41:07 PM	56685
Surr: DNOP	94.7	30.4-154		%Rec	1	11/30/2020 9:41:07 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/30/2020 5:28:53 AM	56681
Toluene	ND	0.049		mg/Kg	1	11/30/2020 5:28:53 AM	56681
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 5:28:53 AM	56681
Xylenes, Total	ND	0.098		mg/Kg	1	11/30/2020 5:28:53 AM	56681
Surr: 1,2-Dichloroethane-d4	95.7	70-130		%Rec	1	11/30/2020 5:28:53 AM	56681
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	11/30/2020 5:28:53 AM	56681
Surr: Dibromofluoromethane	113	70-130		%Rec	1	11/30/2020 5:28:53 AM	56681
Surr: Toluene-d8	88.9	70-130		%Rec	1	11/30/2020 5:28:53 AM	56681

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 28

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 4B

Project: CWMS Release

Collection Date: 11/17/2020

Lab ID: 2011C97-002

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	12/1/2020 12:28:35 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/30/2020 5:55:48 AM	56681
Surr: BFB	91.2	70-130		%Rec	1	11/30/2020 5:55:48 AM	56681
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/30/2020 9:50:34 PM	56685
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/30/2020 9:50:34 PM	56685
Surr: DNOP	102	30.4-154		%Rec	1	11/30/2020 9:50:34 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/30/2020 5:55:48 AM	56681
Toluene	ND	0.050		mg/Kg	1	11/30/2020 5:55:48 AM	56681
Ethylbenzene	ND	0.050		mg/Kg	1	11/30/2020 5:55:48 AM	56681
Xylenes, Total	ND	0.10		mg/Kg	1	11/30/2020 5:55:48 AM	56681
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%Rec	1	11/30/2020 5:55:48 AM	56681
Surr: 4-Bromofluorobenzene	95.7	70-130		%Rec	1	11/30/2020 5:55:48 AM	56681
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/30/2020 5:55:48 AM	56681
Surr: Toluene-d8	89.0	70-130		%Rec	1	11/30/2020 5:55:48 AM	56681

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 10

Project: CWMS Release

Collection Date: 11/23/2020

Lab ID: 2011C97-003

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	99	60		mg/Kg	20	12/1/2020 1:05:48 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/30/2020 6:22:42 AM	56681
Surr: BFB	95.1	70-130		%Rec	1	11/30/2020 6:22:42 AM	56681
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/30/2020 9:59:58 PM	56685
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/30/2020 9:59:58 PM	56685
Surr: DNOP	89.3	30.4-154		%Rec	1	11/30/2020 9:59:58 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/30/2020 6:22:42 AM	56681
Toluene	ND	0.050		mg/Kg	1	11/30/2020 6:22:42 AM	56681
Ethylbenzene	ND	0.050		mg/Kg	1	11/30/2020 6:22:42 AM	56681
Xylenes, Total	ND	0.10		mg/Kg	1	11/30/2020 6:22:42 AM	56681
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%Rec	1	11/30/2020 6:22:42 AM	56681
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	11/30/2020 6:22:42 AM	56681
Surr: Dibromofluoromethane	111	70-130		%Rec	1	11/30/2020 6:22:42 AM	56681
Surr: Toluene-d8	89.9	70-130		%Rec	1	11/30/2020 6:22:42 AM	56681

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 5 4'

Project: CWMS Release

Collection Date: 11/16/2020

Lab ID: 2011C97-004

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	230	60		mg/Kg	20	12/1/2020 1:18:13 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 6:50:12 AM	56681
Surr: BFB	94.3	70-130		%Rec	1	11/30/2020 6:50:12 AM	56681
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/30/2020 10:09:19 PM	56685
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/30/2020 10:09:19 PM	56685
Surr: DNOP	85.2	30.4-154		%Rec	1	11/30/2020 10:09:19 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/30/2020 6:50:12 AM	56681
Toluene	ND	0.049		mg/Kg	1	11/30/2020 6:50:12 AM	56681
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 6:50:12 AM	56681
Xylenes, Total	ND	0.098		mg/Kg	1	11/30/2020 6:50:12 AM	56681
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%Rec	1	11/30/2020 6:50:12 AM	56681
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	11/30/2020 6:50:12 AM	56681
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/30/2020 6:50:12 AM	56681
Surr: Toluene-d8	92.6	70-130		%Rec	1	11/30/2020 6:50:12 AM	56681

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 8 4'

Project: CWMS Release

Collection Date: 11/16/2020

Lab ID: 2011C97-005

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	61		mg/Kg	20	12/1/2020 1:30:37 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/29/2020 6:09:28 PM	56684
Surr: BFB	105	70-130		%Rec	1	11/29/2020 6:09:28 PM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	11/30/2020 10:18:43 PM	56685
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/30/2020 10:18:43 PM	56685
Surr: DNOP	92.1	30.4-154		%Rec	1	11/30/2020 10:18:43 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/29/2020 6:09:28 PM	56684
Toluene	ND	0.050		mg/Kg	1	11/29/2020 6:09:28 PM	56684
Ethylbenzene	ND	0.050		mg/Kg	1	11/29/2020 6:09:28 PM	56684
Xylenes, Total	ND	0.099		mg/Kg	1	11/29/2020 6:09:28 PM	56684
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	11/29/2020 6:09:28 PM	56684
Surr: 4-Bromofluorobenzene	98.3	70-130		%Rec	1	11/29/2020 6:09:28 PM	56684
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/29/2020 6:09:28 PM	56684
Surr: Toluene-d8	88.6	70-130		%Rec	1	11/29/2020 6:09:28 PM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL9 4'

Project: CWMS Release

Collection Date: 11/16/2020

Lab ID: 2011C97-006

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	12/1/2020 1:43:03 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/29/2020 7:34:45 PM	56684
Surr: BFB	103	70-130		%Rec	1	11/29/2020 7:34:45 PM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	11/30/2020 10:28:02 PM	56685
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	11/30/2020 10:28:02 PM	56685
Surr: DNOP	116	30.4-154		%Rec	1	11/30/2020 10:28:02 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	11/29/2020 7:34:45 PM	56684
Toluene	ND	0.049		mg/Kg	1	11/29/2020 7:34:45 PM	56684
Ethylbenzene	ND	0.049		mg/Kg	1	11/29/2020 7:34:45 PM	56684
Xylenes, Total	ND	0.097		mg/Kg	1	11/29/2020 7:34:45 PM	56684
Surr: 1,2-Dichloroethane-d4	98.0	70-130		%Rec	1	11/29/2020 7:34:45 PM	56684
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	11/29/2020 7:34:45 PM	56684
Surr: Dibromofluoromethane	104	70-130		%Rec	1	11/29/2020 7:34:45 PM	56684
Surr: Toluene-d8	88.5	70-130		%Rec	1	11/29/2020 7:34:45 PM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL10 3'

Project: CWMS Release

Collection Date: 11/16/2020

Lab ID: 2011C97-007

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	12/1/2020 1:55:27 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/29/2020 9:00:01 PM	56684
Surr: BFB	109	70-130		%Rec	1	11/29/2020 9:00:01 PM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/30/2020 10:37:17 PM	56685
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/30/2020 10:37:17 PM	56685
Surr: DNOP	88.5	30.4-154		%Rec	1	11/30/2020 10:37:17 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/29/2020 9:00:01 PM	56684
Toluene	ND	0.049		mg/Kg	1	11/29/2020 9:00:01 PM	56684
Ethylbenzene	ND	0.049		mg/Kg	1	11/29/2020 9:00:01 PM	56684
Xylenes, Total	ND	0.099		mg/Kg	1	11/29/2020 9:00:01 PM	56684
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%Rec	1	11/29/2020 9:00:01 PM	56684
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	11/29/2020 9:00:01 PM	56684
Surr: Dibromofluoromethane	103	70-130		%Rec	1	11/29/2020 9:00:01 PM	56684
Surr: Toluene-d8	91.2	70-130		%Rec	1	11/29/2020 9:00:01 PM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL17 4'

Project: CWMS Release

Collection Date: 11/16/2020

Lab ID: 2011C97-008

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	160	60		mg/Kg	20	12/1/2020 2:07:52 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/29/2020 9:28:23 PM	56684
Surr: BFB	103	70-130		%Rec	1	11/29/2020 9:28:23 PM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/30/2020 10:46:34 PM	56685
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2020 10:46:34 PM	56685
Surr: DNOP	81.4	30.4-154		%Rec	1	11/30/2020 10:46:34 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/29/2020 9:28:23 PM	56684
Toluene	ND	0.049		mg/Kg	1	11/29/2020 9:28:23 PM	56684
Ethylbenzene	ND	0.049		mg/Kg	1	11/29/2020 9:28:23 PM	56684
Xylenes, Total	ND	0.099		mg/Kg	1	11/29/2020 9:28:23 PM	56684
Surr: 1,2-Dichloroethane-d4	98.1	70-130		%Rec	1	11/29/2020 9:28:23 PM	56684
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/29/2020 9:28:23 PM	56684
Surr: Dibromofluoromethane	105	70-130		%Rec	1	11/29/2020 9:28:23 PM	56684
Surr: Toluene-d8	84.6	70-130		%Rec	1	11/29/2020 9:28:23 PM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 20 4'

Project: CWMS Release

Collection Date: 11/16/2020

Lab ID: 2011C97-009

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	140	60		mg/Kg	20	12/1/2020 2:20:16 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/29/2020 9:56:44 PM	56684
Surr: BFB	105	70-130		%Rec	1	11/29/2020 9:56:44 PM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/30/2020 10:55:49 PM	56685
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2020 10:55:49 PM	56685
Surr: DNOP	88.5	30.4-154		%Rec	1	11/30/2020 10:55:49 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/29/2020 9:56:44 PM	56684
Toluene	ND	0.050		mg/Kg	1	11/29/2020 9:56:44 PM	56684
Ethylbenzene	ND	0.050		mg/Kg	1	11/29/2020 9:56:44 PM	56684
Xylenes, Total	ND	0.10		mg/Kg	1	11/29/2020 9:56:44 PM	56684
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	11/29/2020 9:56:44 PM	56684
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	11/29/2020 9:56:44 PM	56684
Surr: Dibromofluoromethane	105	70-130		%Rec	1	11/29/2020 9:56:44 PM	56684
Surr: Toluene-d8	92.3	70-130		%Rec	1	11/29/2020 9:56:44 PM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 22 4'

Project: CWMS Release

Collection Date: 11/17/2020

Lab ID: 2011C97-010

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	120	60		mg/Kg	20	12/1/2020 2:57:29 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/29/2020 10:25:04 PM	56684
Surr: BFB	103	70-130		%Rec	1	11/29/2020 10:25:04 PM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/30/2020 11:05:03 PM	56685
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2020 11:05:03 PM	56685
Surr: DNOP	88.3	30.4-154		%Rec	1	11/30/2020 11:05:03 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/29/2020 10:25:04 PM	56684
Toluene	ND	0.050		mg/Kg	1	11/29/2020 10:25:04 PM	56684
Ethylbenzene	ND	0.050		mg/Kg	1	11/29/2020 10:25:04 PM	56684
Xylenes, Total	ND	0.099		mg/Kg	1	11/29/2020 10:25:04 PM	56684
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%Rec	1	11/29/2020 10:25:04 PM	56684
Surr: 4-Bromofluorobenzene	98.9	70-130		%Rec	1	11/29/2020 10:25:04 PM	56684
Surr: Dibromofluoromethane	104	70-130		%Rec	1	11/29/2020 10:25:04 PM	56684
Surr: Toluene-d8	85.7	70-130		%Rec	1	11/29/2020 10:25:04 PM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 24 4'

Project: CWMS Release

Collection Date: 11/17/2020

Lab ID: 2011C97-011

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	69	61		mg/Kg	20	12/1/2020 3:09:54 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/29/2020 10:53:22 PM	56684
Surr: BFB	106	70-130		%Rec	1	11/29/2020 10:53:22 PM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/30/2020 11:14:22 PM	56685
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/30/2020 11:14:22 PM	56685
Surr: DNOP	82.5	30.4-154		%Rec	1	11/30/2020 11:14:22 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	11/29/2020 10:53:22 PM	56684
Toluene	ND	0.049		mg/Kg	1	11/29/2020 10:53:22 PM	56684
Ethylbenzene	ND	0.049		mg/Kg	1	11/29/2020 10:53:22 PM	56684
Xylenes, Total	ND	0.097		mg/Kg	1	11/29/2020 10:53:22 PM	56684
Surr: 1,2-Dichloroethane-d4	98.4	70-130		%Rec	1	11/29/2020 10:53:22 PM	56684
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	11/29/2020 10:53:22 PM	56684
Surr: Dibromofluoromethane	107	70-130		%Rec	1	11/29/2020 10:53:22 PM	56684
Surr: Toluene-d8	88.4	70-130		%Rec	1	11/29/2020 10:53:22 PM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 27 4'

Project: CWMS Release

Collection Date: 11/17/2020

Lab ID: 2011C97-012

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	170	60		mg/Kg	20	12/1/2020 3:22:19 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/29/2020 11:21:40 PM	56684
Surr: BFB	104	70-130		%Rec	1	11/29/2020 11:21:40 PM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/30/2020 11:23:40 PM	56685
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2020 11:23:40 PM	56685
Surr: DNOP	88.1	30.4-154		%Rec	1	11/30/2020 11:23:40 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/29/2020 11:21:40 PM	56684
Toluene	ND	0.050		mg/Kg	1	11/29/2020 11:21:40 PM	56684
Ethylbenzene	ND	0.050		mg/Kg	1	11/29/2020 11:21:40 PM	56684
Xylenes, Total	ND	0.10		mg/Kg	1	11/29/2020 11:21:40 PM	56684
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%Rec	1	11/29/2020 11:21:40 PM	56684
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	11/29/2020 11:21:40 PM	56684
Surr: Dibromofluoromethane	102	70-130		%Rec	1	11/29/2020 11:21:40 PM	56684
Surr: Toluene-d8	88.6	70-130		%Rec	1	11/29/2020 11:21:40 PM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 30 4'

Project: CWMS Release

Collection Date: 11/17/2020

Lab ID: 2011C97-013

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	63	61		mg/Kg	20	12/1/2020 3:34:44 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 2:10:59 AM	56684
Surr: BFB	104	70-130		%Rec	1	11/30/2020 2:10:59 AM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/30/2020 11:33:00 PM	56685
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2020 11:33:00 PM	56685
Surr: DNOP	92.6	30.4-154		%Rec	1	11/30/2020 11:33:00 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/30/2020 2:10:59 AM	56684
Toluene	ND	0.049		mg/Kg	1	11/30/2020 2:10:59 AM	56684
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 2:10:59 AM	56684
Xylenes, Total	ND	0.098		mg/Kg	1	11/30/2020 2:10:59 AM	56684
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	11/30/2020 2:10:59 AM	56684
Surr: 4-Bromofluorobenzene	97.6	70-130		%Rec	1	11/30/2020 2:10:59 AM	56684
Surr: Dibromofluoromethane	104	70-130		%Rec	1	11/30/2020 2:10:59 AM	56684
Surr: Toluene-d8	86.6	70-130		%Rec	1	11/30/2020 2:10:59 AM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 55 4'

Project: CWMS Release

Collection Date: 11/25/2020

Lab ID: 2011C97-014

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	110	60		mg/Kg	20	12/1/2020 3:47:08 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 2:39:08 AM	56684
Surr: BFB	104	70-130		%Rec	1	11/30/2020 2:39:08 AM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/30/2020 11:42:22 PM	56685
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2020 11:42:22 PM	56685
Surr: DNOP	97.0	30.4-154		%Rec	1	11/30/2020 11:42:22 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/30/2020 2:39:08 AM	56684
Toluene	ND	0.049		mg/Kg	1	11/30/2020 2:39:08 AM	56684
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 2:39:08 AM	56684
Xylenes, Total	ND	0.099		mg/Kg	1	11/30/2020 2:39:08 AM	56684
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	11/30/2020 2:39:08 AM	56684
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/30/2020 2:39:08 AM	56684
Surr: Dibromofluoromethane	101	70-130		%Rec	1	11/30/2020 2:39:08 AM	56684
Surr: Toluene-d8	85.6	70-130		%Rec	1	11/30/2020 2:39:08 AM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 56 4'

Project: CWMS Release

Collection Date: 11/25/2020

Lab ID: 2011C97-015

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	61		mg/Kg	20	12/1/2020 3:59:33 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 3:07:17 AM	56684
Surr: BFB	106	70-130		%Rec	1	11/30/2020 3:07:17 AM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/30/2020 11:51:44 PM	56685
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/30/2020 11:51:44 PM	56685
Surr: DNOP	93.7	30.4-154		%Rec	1	11/30/2020 11:51:44 PM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	11/30/2020 3:07:17 AM	56684
Toluene	ND	0.049		mg/Kg	1	11/30/2020 3:07:17 AM	56684
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 3:07:17 AM	56684
Xylenes, Total	ND	0.098		mg/Kg	1	11/30/2020 3:07:17 AM	56684
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	11/30/2020 3:07:17 AM	56684
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	11/30/2020 3:07:17 AM	56684
Surr: Dibromofluoromethane	106	70-130		%Rec	1	11/30/2020 3:07:17 AM	56684
Surr: Toluene-d8	88.8	70-130		%Rec	1	11/30/2020 3:07:17 AM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL57 4'

Project: CWMS Release

Collection Date: 11/25/2020

Lab ID: 2011C97-016

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	80	59		mg/Kg	20	12/1/2020 4:11:57 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/30/2020 3:35:25 AM	56684
Surr: BFB	109	70-130		%Rec	1	11/30/2020 3:35:25 AM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/1/2020 12:01:07 AM	56685
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/1/2020 12:01:07 AM	56685
Surr: DNOP	96.0	30.4-154		%Rec	1	12/1/2020 12:01:07 AM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/30/2020 3:35:25 AM	56684
Toluene	ND	0.050		mg/Kg	1	11/30/2020 3:35:25 AM	56684
Ethylbenzene	ND	0.050		mg/Kg	1	11/30/2020 3:35:25 AM	56684
Xylenes, Total	ND	0.10		mg/Kg	1	11/30/2020 3:35:25 AM	56684
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	11/30/2020 3:35:25 AM	56684
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	11/30/2020 3:35:25 AM	56684
Surr: Dibromofluoromethane	106	70-130		%Rec	1	11/30/2020 3:35:25 AM	56684
Surr: Toluene-d8	87.1	70-130		%Rec	1	11/30/2020 3:35:25 AM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 65 4'

Project: CWMS Release

Collection Date: 11/25/2020

Lab ID: 2011C97-017

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	180	60		mg/Kg	20	12/1/2020 4:24:21 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 4:03:32 AM	56684
Surr: BFB	103	70-130		%Rec	1	11/30/2020 4:03:32 AM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/1/2020 12:10:35 AM	56685
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/1/2020 12:10:35 AM	56685
Surr: DNOP	96.6	30.4-154		%Rec	1	12/1/2020 12:10:35 AM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/30/2020 4:03:32 AM	56684
Toluene	ND	0.049		mg/Kg	1	11/30/2020 4:03:32 AM	56684
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 4:03:32 AM	56684
Xylenes, Total	ND	0.099		mg/Kg	1	11/30/2020 4:03:32 AM	56684
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	11/30/2020 4:03:32 AM	56684
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	11/30/2020 4:03:32 AM	56684
Surr: Dibromofluoromethane	104	70-130		%Rec	1	11/30/2020 4:03:32 AM	56684
Surr: Toluene-d8	85.7	70-130		%Rec	1	11/30/2020 4:03:32 AM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 66 4'

Project: CWMS Release

Collection Date: 11/25/2020

Lab ID: 2011C97-018

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	310	61		mg/Kg	20	12/1/2020 4:36:46 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 4:31:38 AM	56684
Surr: BFB	108	70-130		%Rec	1	11/30/2020 4:31:38 AM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/1/2020 12:20:09 AM	56685
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/1/2020 12:20:09 AM	56685
Surr: DNOP	92.0	30.4-154		%Rec	1	12/1/2020 12:20:09 AM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/30/2020 4:31:38 AM	56684
Toluene	ND	0.049		mg/Kg	1	11/30/2020 4:31:38 AM	56684
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 4:31:38 AM	56684
Xylenes, Total	ND	0.099		mg/Kg	1	11/30/2020 4:31:38 AM	56684
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	11/30/2020 4:31:38 AM	56684
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	11/30/2020 4:31:38 AM	56684
Surr: Dibromofluoromethane	101	70-130		%Rec	1	11/30/2020 4:31:38 AM	56684
Surr: Toluene-d8	86.2	70-130		%Rec	1	11/30/2020 4:31:38 AM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 71 4'

Project: CWMS Release

Collection Date: 11/25/2020

Lab ID: 2011C97-019

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	370	60		mg/Kg	20	12/1/2020 4:49:11 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 4:59:45 AM	56684
Surr: BFB	104	70-130		%Rec	1	11/30/2020 4:59:45 AM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/1/2020 12:29:45 AM	56685
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/1/2020 12:29:45 AM	56685
Surr: DNOP	96.5	30.4-154		%Rec	1	12/1/2020 12:29:45 AM	56685
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/30/2020 4:59:45 AM	56684
Toluene	ND	0.049		mg/Kg	1	11/30/2020 4:59:45 AM	56684
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 4:59:45 AM	56684
Xylenes, Total	ND	0.098		mg/Kg	1	11/30/2020 4:59:45 AM	56684
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	11/30/2020 4:59:45 AM	56684
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	11/30/2020 4:59:45 AM	56684
Surr: Dibromofluoromethane	102	70-130		%Rec	1	11/30/2020 4:59:45 AM	56684
Surr: Toluene-d8	86.0	70-130		%Rec	1	11/30/2020 4:59:45 AM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 75 4'

Project: CWMS Release

Collection Date: 11/25/2020

Lab ID: 2011C97-020

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	210	60		mg/Kg	20	12/1/2020 5:26:24 AM	56715
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 5:27:51 AM	56684
Surr: BFB	103	70-130		%Rec	1	11/30/2020 5:27:51 AM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/1/2020 1:10:25 PM	56713
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/1/2020 1:10:25 PM	56713
Surr: DNOP	109	30.4-154		%Rec	1	12/1/2020 1:10:25 PM	56713
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/30/2020 5:27:51 AM	56684
Toluene	ND	0.049		mg/Kg	1	11/30/2020 5:27:51 AM	56684
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 5:27:51 AM	56684
Xylenes, Total	ND	0.098		mg/Kg	1	11/30/2020 5:27:51 AM	56684
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	11/30/2020 5:27:51 AM	56684
Surr: 4-Bromofluorobenzene	99.4	70-130		%Rec	1	11/30/2020 5:27:51 AM	56684
Surr: Dibromofluoromethane	100	70-130		%Rec	1	11/30/2020 5:27:51 AM	56684
Surr: Toluene-d8	86.2	70-130		%Rec	1	11/30/2020 5:27:51 AM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 82 4'

Project: CWMS Release

Collection Date: 11/25/2020

Lab ID: 2011C97-021

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	420	60		mg/Kg	20	12/2/2020 5:46:41 PM	56744
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/30/2020 5:55:57 AM	56684
Surr: BFB	103	70-130		%Rec	1	11/30/2020 5:55:57 AM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/1/2020 1:20:12 PM	56713
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/1/2020 1:20:12 PM	56713
Surr: DNOP	102	30.4-154		%Rec	1	12/1/2020 1:20:12 PM	56713
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/30/2020 5:55:57 AM	56684
Toluene	ND	0.050		mg/Kg	1	11/30/2020 5:55:57 AM	56684
Ethylbenzene	ND	0.050		mg/Kg	1	11/30/2020 5:55:57 AM	56684
Xylenes, Total	ND	0.099		mg/Kg	1	11/30/2020 5:55:57 AM	56684
Surr: 1,2-Dichloroethane-d4	93.8	70-130		%Rec	1	11/30/2020 5:55:57 AM	56684
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/30/2020 5:55:57 AM	56684
Surr: Dibromofluoromethane	102	70-130		%Rec	1	11/30/2020 5:55:57 AM	56684
Surr: Toluene-d8	86.7	70-130		%Rec	1	11/30/2020 5:55:57 AM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C97

Date Reported: 12/8/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 84 4'

Project: CWMS Release

Collection Date: 11/25/2020

Lab ID: 2011C97-022

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	430	60		mg/Kg	20	12/2/2020 5:59:05 PM	56744
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 6:24:04 AM	56684
Surr: BFB	103	70-130		%Rec	1	11/30/2020 6:24:04 AM	56684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/1/2020 1:30:00 PM	56713
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/1/2020 1:30:00 PM	56713
Surr: DNOP	98.8	30.4-154		%Rec	1	12/1/2020 1:30:00 PM	56713
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	11/30/2020 6:24:04 AM	56684
Toluene	ND	0.049		mg/Kg	1	11/30/2020 6:24:04 AM	56684
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 6:24:04 AM	56684
Xylenes, Total	ND	0.099		mg/Kg	1	11/30/2020 6:24:04 AM	56684
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%Rec	1	11/30/2020 6:24:04 AM	56684
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	11/30/2020 6:24:04 AM	56684
Surr: Dibromofluoromethane	103	70-130		%Rec	1	11/30/2020 6:24:04 AM	56684
Surr: Toluene-d8	85.9	70-130		%Rec	1	11/30/2020 6:24:04 AM	56684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011C97

08-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-56715	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56715	RunNo: 73668								
Prep Date: 11/30/2020	Analysis Date: 11/30/2020	SeqNo: 2597369	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56715	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56715	RunNo: 73668								
Prep Date: 11/30/2020	Analysis Date: 11/30/2020	SeqNo: 2597370	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	90	110			

Sample ID: MB-56744	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56744	RunNo: 73718								
Prep Date: 12/2/2020	Analysis Date: 12/2/2020	SeqNo: 2599163	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56744	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56744	RunNo: 73718								
Prep Date: 12/2/2020	Analysis Date: 12/2/2020	SeqNo: 2599164	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.3	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011C97

08-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: LCS-56685	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 56685	RunNo: 73679								
Prep Date: 11/28/2020	Analysis Date: 11/30/2020	SeqNo: 2596913	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	70	130			
Surr: DNOP	4.7		5.000		93.6	30.4	154			

Sample ID: MB-56685	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 56685	RunNo: 73679								
Prep Date: 11/28/2020	Analysis Date: 11/30/2020	SeqNo: 2596917	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		91.9	30.4	154			

Sample ID: LCS-56713	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 56713	RunNo: 73695								
Prep Date: 11/30/2020	Analysis Date: 12/1/2020	SeqNo: 2598000	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	10	50.00	0	121	70	130			
Surr: DNOP	6.5		5.000		130	30.4	154			

Sample ID: MB-56713	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 56713	RunNo: 73695								
Prep Date: 11/30/2020	Analysis Date: 12/1/2020	SeqNo: 2598002	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		120	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 24 of 28

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011C97

08-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-56681	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 56681	RunNo: 73649								
Prep Date: 11/28/2020	Analysis Date: 11/29/2020	SeqNo: 2595647	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.1	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		109	70	130			
Surr: Toluene-d8	0.48		0.5000		95.1	70	130			

Sample ID: lcs-56681	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 56681	RunNo: 73649								
Prep Date: 11/28/2020	Analysis Date: 11/29/2020	SeqNo: 2595649	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	108	80	120			
Toluene	1.0	0.050	1.000	0	99.7	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total	2.8	0.10	3.000	0	95.0	80	120			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.0	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.47		0.5000		93.3	70	130			

Sample ID: lcs-56684	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 56684	RunNo: 73660								
Prep Date: 11/28/2020	Analysis Date: 11/29/2020	SeqNo: 2596237	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	119	80	120			
Toluene	1.1	0.050	1.000	0	106	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.3	0.10	3.000	0	109	80	120			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		109	70	130			
Surr: Toluene-d8	0.44		0.5000		87.4	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011C97

08-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-56684	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 56684	RunNo: 73660								
Prep Date: 11/28/2020	Analysis Date: 11/29/2020	SeqNo: 2596238	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		105	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.5	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.44		0.5000		87.8	70	130			

Sample ID: 2011c97-005ams	SampType: MS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: FL 8 4'	Batch ID: 56684	RunNo: 73660								
Prep Date: 11/28/2020	Analysis Date: 11/29/2020	SeqNo: 2596249	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.3	0.024	0.9785	0	132	71.1	115			S
Toluene	1.1	0.049	0.9785	0	114	79.6	132			
Ethylbenzene	1.1	0.049	0.9785	0	116	83.8	134			
Xylenes, Total	3.5	0.098	2.935	0	120	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.49		0.4892		99.9	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.4892		98.3	70	130			
Surr: Dibromofluoromethane	0.52		0.4892		107	70	130			
Surr: Toluene-d8	0.43		0.4892		88.4	70	130			

Sample ID: 2011c97-005amsd	SampType: MSD4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: FL 8 4'	Batch ID: 56684	RunNo: 73660								
Prep Date: 11/28/2020	Analysis Date: 11/29/2020	SeqNo: 2596250	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.3	0.025	0.9940	0	127	71.1	115	2.03	20	S
Toluene	1.1	0.050	0.9940	0	110	79.6	132	2.18	20	
Ethylbenzene	1.0	0.050	0.9940	0	104	83.8	134	9.24	20	
Xylenes, Total	3.3	0.099	2.982	0	112	82.4	132	5.76	20	
Surr: 1,2-Dichloroethane-d4	0.52		0.4970		105	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.47		0.4970		95.4	70	130	0	0	
Surr: Dibromofluoromethane	0.55		0.4970		111	70	130	0	0	
Surr: Toluene-d8	0.45		0.4970		90.0	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011C97

08-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-56681	SampType: MBLK			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: PBS	Batch ID: 56681			RunNo: 73649						
Prep Date: 11/28/2020	Analysis Date: 11/29/2020			SeqNo: 2595868		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		101	70	130			

Sample ID: lcs-56681	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batch ID: 56681			RunNo: 73649						
Prep Date: 11/28/2020	Analysis Date: 11/29/2020			SeqNo: 2595869		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	82.5	70	130			
Surr: BFB	490		500.0		97.8	70	130			

Sample ID: lcs-56684	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batch ID: 56684			RunNo: 73660						
Prep Date: 11/28/2020	Analysis Date: 11/29/2020			SeqNo: 2596278		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.4	70	130			
Surr: BFB	500		500.0		99.7	70	130			

Sample ID: mb-56684	SampType: MBLK			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: PBS	Batch ID: 56684			RunNo: 73660						
Prep Date: 11/28/2020	Analysis Date: 11/29/2020			SeqNo: 2596279		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	540		500.0		107	70	130			

Sample ID: 2011c97-006ams	SampType: MS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: FL9 4'	Batch ID: 56684			RunNo: 73660						
Prep Date: 11/28/2020	Analysis Date: 11/29/2020			SeqNo: 2596291		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	24.75	0	98.8	49.2	122			
Surr: BFB	530		495.0		106	70	130			

Sample ID: 2011c97-006amsd	SampType: MSD			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: FL9 4'	Batch ID: 56684			RunNo: 73660						
Prep Date: 11/28/2020	Analysis Date: 11/29/2020			SeqNo: 2596292		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2011C97

08-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

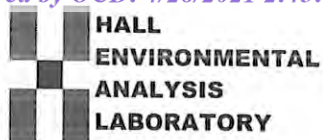
Sample ID: 2011c97-006amsd		SampType: MSD		TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: FL9 4'		Batch ID: 56684			RunNo: 73660					
Prep Date: 11/28/2020		Analysis Date: 11/29/2020			SeqNo: 2596292		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.56	0	97.4	49.2	122	2.22	20	
Surr: BFB	500		491.2		101	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2011C97

RcptNo: 1

Received By: Andy Freeman

11/28/2020

Completed By: Erin Melendrez

11/30/2020 8:39:31 AM

Reviewed By: DF 11/28/2020

Logged in and labelled by df 11/28/2020

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? FedEx

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good				

Chain-of-Custody Record

Client: MEWBOURNE

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: 5 DAY

☒ Standard ☐ Rush

Project Name: CWMS Release

Project #: 13296

Project Manager: Lance Crenshaw

Sampler: Laurel Moles

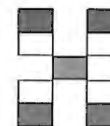
On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): 1.9 + 0.1 = 2.0 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
11/17/20		Soil	FL 30 @ 4'	1	Ice	2011C97-13
11/25/20		Soil	FL 55 @ 4'	1	Ice	-14
11/25/20		Soil	FL 56 @ 4'	1	Ice	-15
11/25/20		Soil	FL 57 @ 4'	1	Ice	-16
11/25/20		Soil	FL 65 @ 4'	1	Ice	-17
11/25/20		Soil	FL 66 @ 4'	1	Ice	-18
11/25/20		Soil	FL 71 @ 4'	1	Ice	-19
11/25/20		Soil	FL 75 @ 4'	1	Ice	-20
11/25/20		Soil	FL 82 @ 4'	1	Ice	-21
11/25/20		Soil	FL 84 @ 4'	1	Ice	-22

Date: <u>11/27/20</u>	Time: <u>1900</u>	Relinquished by: <u>Adumming</u>	Received by: <u>Adumming</u>	Via: _____	Date: <u>11/25/20</u>	Time: <u>1515</u>
Date: <u>11/27/20</u>	Time: <u>1900</u>	Relinquished by: <u>Adumming</u>	Received by: <u>Adumming</u>	Via: _____	Date: <u>11/28/2020</u>	Time: <u>1030</u>



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)										
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													

Remarks:



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

December 10, 2020

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX:

RE: CWMS Release

OrderNo.: 2012236

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 7 sample(s) on 12/4/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2012236

Date Reported: 12/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 7

Project: CWMS Release

Collection Date: 11/30/2020

Lab ID: 2012236-001

Matrix: SOIL

Received Date: 12/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	61		mg/Kg	20	12/7/2020 5:05:19 PM	56826
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/5/2020 12:45:01 PM	56804
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/5/2020 12:45:01 PM	56804
Surr: DNOP	101	30.4-154		%Rec	1	12/5/2020 12:45:01 PM	56804
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/5/2020 3:46:01 PM	56802
Surr: BFB	108	75.3-105	S	%Rec	1	12/5/2020 3:46:01 PM	56802
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	12/5/2020 3:46:01 PM	56802
Toluene	ND	0.050		mg/Kg	1	12/5/2020 3:46:01 PM	56802
Ethylbenzene	ND	0.050		mg/Kg	1	12/5/2020 3:46:01 PM	56802
Xylenes, Total	ND	0.099		mg/Kg	1	12/5/2020 3:46:01 PM	56802
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	12/5/2020 3:46:01 PM	56802

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012236

Date Reported: 12/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 11

Project: CWMS Release

Collection Date: 11/30/2020

Lab ID: 2012236-002

Matrix: SOIL

Received Date: 12/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/7/2020 5:17:43 PM	56826
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/5/2020 12:54:46 PM	56804
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/5/2020 12:54:46 PM	56804
Surr: DNOP	82.0	30.4-154		%Rec	1	12/5/2020 12:54:46 PM	56804
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/5/2020 4:10:02 PM	56802
Surr: BFB	105	75.3-105		%Rec	1	12/5/2020 4:10:02 PM	56802
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	12/5/2020 4:10:02 PM	56802
Toluene	ND	0.049		mg/Kg	1	12/5/2020 4:10:02 PM	56802
Ethylbenzene	ND	0.049		mg/Kg	1	12/5/2020 4:10:02 PM	56802
Xylenes, Total	ND	0.099		mg/Kg	1	12/5/2020 4:10:02 PM	56802
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	12/5/2020 4:10:02 PM	56802

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012236

Date Reported: 12/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 2B

Project: CWMS Release

Collection Date: 11/30/2020

Lab ID: 2012236-003

Matrix: SOIL

Received Date: 12/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/7/2020 5:54:56 PM	56845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/5/2020 1:04:30 PM	56804
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/5/2020 1:04:30 PM	56804
Surr: DNOP	79.6	30.4-154		%Rec	1	12/5/2020 1:04:30 PM	56804
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/5/2020 4:34:00 PM	56802
Surr: BFB	104	75.3-105		%Rec	1	12/5/2020 4:34:00 PM	56802
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/5/2020 4:34:00 PM	56802
Toluene	ND	0.049		mg/Kg	1	12/5/2020 4:34:00 PM	56802
Ethylbenzene	ND	0.049		mg/Kg	1	12/5/2020 4:34:00 PM	56802
Xylenes, Total	ND	0.097		mg/Kg	1	12/5/2020 4:34:00 PM	56802
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	12/5/2020 4:34:00 PM	56802

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012236

Date Reported: 12/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 12

Project: CWMS Release

Collection Date: 12/1/2020

Lab ID: 2012236-004

Matrix: SOIL

Received Date: 12/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/7/2020 6:07:21 PM	56845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/5/2020 1:14:13 PM	56804
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/5/2020 1:14:13 PM	56804
Surr: DNOP	82.7	30.4-154		%Rec	1	12/5/2020 1:14:13 PM	56804
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/5/2020 4:57:55 PM	56802
Surr: BFB	105	75.3-105		%Rec	1	12/5/2020 4:57:55 PM	56802
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	12/5/2020 4:57:55 PM	56802
Toluene	ND	0.049		mg/Kg	1	12/5/2020 4:57:55 PM	56802
Ethylbenzene	ND	0.049		mg/Kg	1	12/5/2020 4:57:55 PM	56802
Xylenes, Total	ND	0.098		mg/Kg	1	12/5/2020 4:57:55 PM	56802
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	12/5/2020 4:57:55 PM	56802

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012236

Date Reported: 12/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 8

Project: CWMS Release

Collection Date: 12/1/2020

Lab ID: 2012236-005

Matrix: SOIL

Received Date: 12/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/7/2020 6:44:33 PM	56845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/5/2020 1:23:57 PM	56804
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/5/2020 1:23:57 PM	56804
Surr: DNOP	72.9	30.4-154		%Rec	1	12/5/2020 1:23:57 PM	56804
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/5/2020 5:21:49 PM	56802
Surr: BFB	106	75.3-105	S	%Rec	1	12/5/2020 5:21:49 PM	56802
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	12/5/2020 5:21:49 PM	56802
Toluene	ND	0.050		mg/Kg	1	12/5/2020 5:21:49 PM	56802
Ethylbenzene	ND	0.050		mg/Kg	1	12/5/2020 5:21:49 PM	56802
Xylenes, Total	ND	0.10		mg/Kg	1	12/5/2020 5:21:49 PM	56802
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	12/5/2020 5:21:49 PM	56802

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012236

Date Reported: 12/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 13

Project: CWMS Release

Collection Date: 12/2/2020

Lab ID: 2012236-006

Matrix: SOIL

Received Date: 12/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/7/2020 6:56:58 PM	56845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/5/2020 1:33:41 PM	56804
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/5/2020 1:33:41 PM	56804
Surr: DNOP	98.3	30.4-154		%Rec	1	12/5/2020 1:33:41 PM	56804
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/5/2020 5:45:45 PM	56802
Surr: BFB	104	75.3-105		%Rec	1	12/5/2020 5:45:45 PM	56802
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	12/5/2020 5:45:45 PM	56802
Toluene	ND	0.049		mg/Kg	1	12/5/2020 5:45:45 PM	56802
Ethylbenzene	ND	0.049		mg/Kg	1	12/5/2020 5:45:45 PM	56802
Xylenes, Total	ND	0.099		mg/Kg	1	12/5/2020 5:45:45 PM	56802
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	12/5/2020 5:45:45 PM	56802

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012236

Date Reported: 12/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 9

Project: CWMS Release

Collection Date: 12/2/2020

Lab ID: 2012236-007

Matrix: SOIL

Received Date: 12/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	80	61		mg/Kg	20	12/7/2020 7:09:22 PM	56845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/5/2020 1:43:24 PM	56804
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/5/2020 1:43:24 PM	56804
Surr: DNOP	67.0	30.4-154		%Rec	1	12/5/2020 1:43:24 PM	56804
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/5/2020 6:09:37 PM	56802
Surr: BFB	100	75.3-105		%Rec	1	12/5/2020 6:09:37 PM	56802
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	12/5/2020 6:09:37 PM	56802
Toluene	ND	0.050		mg/Kg	1	12/5/2020 6:09:37 PM	56802
Ethylbenzene	ND	0.050		mg/Kg	1	12/5/2020 6:09:37 PM	56802
Xylenes, Total	ND	0.10		mg/Kg	1	12/5/2020 6:09:37 PM	56802
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	12/5/2020 6:09:37 PM	56802

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012236

10-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-56826	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56826	RunNo: 73830								
Prep Date: 12/7/2020	Analysis Date: 12/7/2020	SeqNo: 2604047	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56826	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56826	RunNo: 73830								
Prep Date: 12/7/2020	Analysis Date: 12/7/2020	SeqNo: 2604048	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.6	90	110			

Sample ID: MB-56845	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56845	RunNo: 73830								
Prep Date: 12/7/2020	Analysis Date: 12/7/2020	SeqNo: 2604077	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56845	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56845	RunNo: 73830								
Prep Date: 12/7/2020	Analysis Date: 12/7/2020	SeqNo: 2604078	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.6	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 8 of 11

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012236

10-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-56804	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 56804	RunNo: 73808								
Prep Date: 12/4/2020	Analysis Date: 12/5/2020	SeqNo: 2601641	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	13		10.00		133	30.4	154			

Sample ID: LCS-56804	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 56804	RunNo: 73808								
Prep Date: 12/4/2020	Analysis Date: 12/5/2020	SeqNo: 2601643	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.9	70	130			
Surr: DNOP	5.1		5.000		103	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012236

10-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-56802	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 56802	RunNo: 73815								
Prep Date: 12/4/2020	Analysis Date: 12/5/2020	SeqNo: 2602132	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		105	75.3	105			

Sample ID: lcs-56802	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 56802	RunNo: 73815								
Prep Date: 12/4/2020	Analysis Date: 12/5/2020	SeqNo: 2602133	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.3	72.5	106			
Surr: BFB	1100		1000		112	75.3	105			S

Sample ID: mb-56805	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 56805	RunNo: 73815								
Prep Date: 12/4/2020	Analysis Date: 12/6/2020	SeqNo: 2602155	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		100	75.3	105			

Sample ID: lcs-56805	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 56805	RunNo: 73815								
Prep Date: 12/4/2020	Analysis Date: 12/5/2020	SeqNo: 2602156	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		112	75.3	105			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012236

10-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-56802	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 56802		RunNo: 73815							
Prep Date: 12/4/2020	Analysis Date: 12/5/2020		SeqNo: 2602184		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID: LCS-56802	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 56802		RunNo: 73815							
Prep Date: 12/4/2020	Analysis Date: 12/5/2020		SeqNo: 2602185		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.2	80	120			
Toluene	0.99	0.050	1.000	0	98.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.9	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

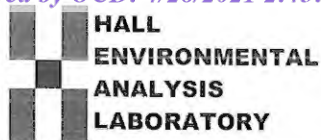
Sample ID: mb-56805	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 56805		RunNo: 73815							
Prep Date: 12/4/2020	Analysis Date: 12/6/2020		SeqNo: 2602207		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: LCS-56805	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 56805		RunNo: 73815							
Prep Date: 12/4/2020	Analysis Date: 12/6/2020		SeqNo: 2602208		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2012236

RcptNo: 1

Received By: Sean Livingston 12/4/2020 8:00:00 AM

Completed By: Desiree Dominguez 12/4/2020 8:44:28 AM

Reviewed By: *cu*
12/4/20
12/4/20
SL
DD
Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *SGC 12/4/20*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good				
2	0.2	Good				
3	1.5	Good				



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

December 16, 2020

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX

RE: CWMS Release

OrderNo.: 2012361

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 8 sample(s) on 12/8/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2012361

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 10

Project: CWMS Release

Collection Date: 12/3/2020

Lab ID: 2012361-001

Matrix: SOIL

Received Date: 12/8/2020 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	65	60		mg/Kg	20	12/13/2020 4:19:01 PM	56964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/9/2020 6:26:23 PM	56869
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/9/2020 6:26:23 PM	56869
Surr: DNOP	96.7	30.4-154		%Rec	1	12/9/2020 6:26:23 PM	56869
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/11/2020 3:28:17 AM	56865
Surr: BFB	87.4	75.3-105		%Rec	1	12/11/2020 3:28:17 AM	56865
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	12/11/2020 3:28:17 AM	56865
Toluene	ND	0.049		mg/Kg	1	12/11/2020 3:28:17 AM	56865
Ethylbenzene	ND	0.049		mg/Kg	1	12/11/2020 3:28:17 AM	56865
Xylenes, Total	ND	0.097		mg/Kg	1	12/11/2020 3:28:17 AM	56865
Surr: 4-Bromofluorobenzene	86.4	80-120		%Rec	1	12/11/2020 3:28:17 AM	56865

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012361

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 11

Project: CWMS Release

Collection Date: 12/3/2020

Lab ID: 2012361-002

Matrix: SOIL

Received Date: 12/8/2020 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	61		mg/Kg	20	12/13/2020 4:56:15 PM	56964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/9/2020 6:35:52 PM	56869
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/9/2020 6:35:52 PM	56869
Surr: DNOP	104	30.4-154		%Rec	1	12/9/2020 6:35:52 PM	56869
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/11/2020 3:51:34 AM	56865
Surr: BFB	88.5	75.3-105		%Rec	1	12/11/2020 3:51:34 AM	56865
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	12/11/2020 3:51:34 AM	56865
Toluene	ND	0.049		mg/Kg	1	12/11/2020 3:51:34 AM	56865
Ethylbenzene	ND	0.049		mg/Kg	1	12/11/2020 3:51:34 AM	56865
Xylenes, Total	ND	0.099		mg/Kg	1	12/11/2020 3:51:34 AM	56865
Surr: 4-Bromofluorobenzene	87.3	80-120		%Rec	1	12/11/2020 3:51:34 AM	56865

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012361

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 12

Project: CWMS Release

Collection Date: 12/3/2020

Lab ID: 2012361-003

Matrix: SOIL

Received Date: 12/8/2020 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	81	60		mg/Kg	20	12/13/2020 5:08:39 PM	56964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/9/2020 6:45:20 PM	56869
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/9/2020 6:45:20 PM	56869
Surr: DNOP	124	30.4-154		%Rec	1	12/9/2020 6:45:20 PM	56869
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/11/2020 4:14:52 AM	56865
Surr: BFB	87.6	75.3-105		%Rec	1	12/11/2020 4:14:52 AM	56865
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	12/11/2020 4:14:52 AM	56865
Toluene	ND	0.048		mg/Kg	1	12/11/2020 4:14:52 AM	56865
Ethylbenzene	ND	0.048		mg/Kg	1	12/11/2020 4:14:52 AM	56865
Xylenes, Total	ND	0.096		mg/Kg	1	12/11/2020 4:14:52 AM	56865
Surr: 4-Bromofluorobenzene	87.1	80-120		%Rec	1	12/11/2020 4:14:52 AM	56865

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012361

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 13

Project: CWMS Release

Collection Date: 12/3/2020

Lab ID: 2012361-004

Matrix: SOIL

Received Date: 12/8/2020 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	320	60		mg/Kg	20	12/13/2020 5:21:04 PM	56964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/9/2020 6:54:48 PM	56869
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/9/2020 6:54:48 PM	56869
Surr: DNOP	84.6	30.4-154		%Rec	1	12/9/2020 6:54:48 PM	56869
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/11/2020 12:42:11 PM	56865
Surr: BFB	92.3	75.3-105		%Rec	1	12/11/2020 12:42:11 PM	56865
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	12/11/2020 12:42:11 PM	56865
Toluene	ND	0.050		mg/Kg	1	12/11/2020 12:42:11 PM	56865
Ethylbenzene	ND	0.050		mg/Kg	1	12/11/2020 12:42:11 PM	56865
Xylenes, Total	ND	0.10		mg/Kg	1	12/11/2020 12:42:11 PM	56865
Surr: 4-Bromofluorobenzene	90.2	80-120		%Rec	1	12/11/2020 12:42:11 PM	56865

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012361

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 14

Project: CWMS Release

Collection Date: 12/3/2020

Lab ID: 2012361-005

Matrix: SOIL

Received Date: 12/8/2020 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	190	60		mg/Kg	20	12/13/2020 5:33:28 PM	56964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/9/2020 7:04:17 PM	56869
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/9/2020 7:04:17 PM	56869
Surr: DNOP	90.3	30.4-154		%Rec	1	12/9/2020 7:04:17 PM	56869
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/11/2020 1:05:43 PM	56865
Surr: BFB	91.8	75.3-105		%Rec	1	12/11/2020 1:05:43 PM	56865
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	12/11/2020 1:05:43 PM	56865
Toluene	ND	0.047		mg/Kg	1	12/11/2020 1:05:43 PM	56865
Ethylbenzene	ND	0.047		mg/Kg	1	12/11/2020 1:05:43 PM	56865
Xylenes, Total	ND	0.095		mg/Kg	1	12/11/2020 1:05:43 PM	56865
Surr: 4-Bromofluorobenzene	89.9	80-120		%Rec	1	12/11/2020 1:05:43 PM	56865

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012361

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 15

Project: CWMS Release

Collection Date: 12/3/2020

Lab ID: 2012361-006

Matrix: SOIL

Received Date: 12/8/2020 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	61		mg/Kg	20	12/13/2020 5:45:53 PM	56964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	12/9/2020 7:13:46 PM	56869
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/9/2020 7:13:46 PM	56869
Surr: DNOP	120	30.4-154		%Rec	1	12/9/2020 7:13:46 PM	56869
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/11/2020 1:29:17 PM	56865
Surr: BFB	93.4	75.3-105		%Rec	1	12/11/2020 1:29:17 PM	56865
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	12/11/2020 1:29:17 PM	56865
Toluene	ND	0.048		mg/Kg	1	12/11/2020 1:29:17 PM	56865
Ethylbenzene	ND	0.048		mg/Kg	1	12/11/2020 1:29:17 PM	56865
Xylenes, Total	ND	0.097		mg/Kg	1	12/11/2020 1:29:17 PM	56865
Surr: 4-Bromofluorobenzene	91.8	80-120		%Rec	1	12/11/2020 1:29:17 PM	56865

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012361

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 16

Project: CWMS Release

Collection Date: 12/3/2020

Lab ID: 2012361-007

Matrix: SOIL

Received Date: 12/8/2020 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/13/2020 6:23:06 PM	56964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	12/9/2020 7:23:14 PM	56869
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/9/2020 7:23:14 PM	56869
Surr: DNOP	110	30.4-154		%Rec	1	12/9/2020 7:23:14 PM	56869
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/11/2020 1:52:40 PM	56865
Surr: BFB	91.0	75.3-105		%Rec	1	12/11/2020 1:52:40 PM	56865
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	12/11/2020 1:52:40 PM	56865
Toluene	ND	0.048		mg/Kg	1	12/11/2020 1:52:40 PM	56865
Ethylbenzene	ND	0.048		mg/Kg	1	12/11/2020 1:52:40 PM	56865
Xylenes, Total	ND	0.096		mg/Kg	1	12/11/2020 1:52:40 PM	56865
Surr: 4-Bromofluorobenzene	88.7	80-120		%Rec	1	12/11/2020 1:52:40 PM	56865

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012361

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 6C

Project: CWMS Release

Collection Date: 12/7/2020

Lab ID: 2012361-008

Matrix: SOIL

Received Date: 12/8/2020 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/13/2020 6:35:31 PM	56964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/9/2020 7:32:44 PM	56869
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/9/2020 7:32:44 PM	56869
Surr: DNOP	102	30.4-154		%Rec	1	12/9/2020 7:32:44 PM	56869
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/11/2020 2:16:10 PM	56865
Surr: BFB	93.6	75.3-105		%Rec	1	12/11/2020 2:16:10 PM	56865
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	12/11/2020 2:16:10 PM	56865
Toluene	ND	0.048		mg/Kg	1	12/11/2020 2:16:10 PM	56865
Ethylbenzene	ND	0.048		mg/Kg	1	12/11/2020 2:16:10 PM	56865
Xylenes, Total	ND	0.097		mg/Kg	1	12/11/2020 2:16:10 PM	56865
Surr: 4-Bromofluorobenzene	89.6	80-120		%Rec	1	12/11/2020 2:16:10 PM	56865

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012361

16-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-56964	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56964	RunNo: 73975								
Prep Date: 12/13/2020	Analysis Date: 12/13/2020	SeqNo: 2609319	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56964	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56964	RunNo: 73975								
Prep Date: 12/13/2020	Analysis Date: 12/13/2020	SeqNo: 2609320	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.9	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 9 of 12

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012361

16-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: LCS-56869	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 56869		RunNo: 73877							
Prep Date: 12/8/2020	Analysis Date: 12/9/2020		SeqNo: 2606332		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	10	50.00	0	114	70	130			
Surr: DNOP	6.9		5.000		138	30.4	154			

Sample ID: MB-56869	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 56869		RunNo: 73877							
Prep Date: 12/8/2020	Analysis Date: 12/9/2020		SeqNo: 2606333		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		106	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012361

16-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: lcs-56865	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 56865				RunNo: 73943					
Prep Date: 12/8/2020	Analysis Date: 12/10/2020				SeqNo: 2607657	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.8	72.5	106			
Surr: BFB	980		1000		98.0	75.3	105			

Sample ID: mb-56865	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 56865				RunNo: 73943					
Prep Date: 12/8/2020	Analysis Date: 12/10/2020				SeqNo: 2607659	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	870		1000		87.2	75.3	105			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012361

16-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: LCS-56865	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 56865		RunNo: 73943							
Prep Date: 12/8/2020	Analysis Date: 12/10/2020		SeqNo: 2607706		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.4	80	120			
Toluene	0.95	0.050	1.000	0	94.7	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.9	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.6	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		88.9	80	120			

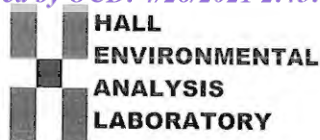
Sample ID: mb-56865	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 56865		RunNo: 73943							
Prep Date: 12/8/2020	Analysis Date: 12/10/2020		SeqNo: 2607708		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		86.5	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2012361

RcptNo: 1

Received By: Isaiah Ortiz

12/8/2020 7:45:00 AM

I-OX

Completed By: Desiree Dominguez

12/8/2020 9:40:33 AM

ID

Reviewed By: SGL 12/8/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: JR 12/8/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good	Yes			

Released to Imaging: 8/23/2021 11:37:48 AM

Turn-Around Time: 5 Day Rush

☒ Standard ☐ **Rush**

Project Name: CHIMS RELEASE

Project #: 13296

Project Manager: Lance Crenshaw

Sampler: Wood Miller

☐ Standard ☐ Level 4 (Full Validation)

On Ice: ☒ Yes ☐ No

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other☐ EDD (Type)Cooler Temp (including CF): $0.1^{\circ}\text{C} \pm 0$ ($^{\circ}\text{C}$)

Received by OCD: 4/28/2021 2:43:51 PM

Received by:	Via:	Date	Time
Cummins		12/7/20	1530

Received by:	Via:	Date	Time
<i>[Signature]</i>	<i>[Signature]</i>	12/8/20	0745

email results
to pme etechnew con
sol intact TO 12/8/20

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

December 16, 2020

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX

RE: CWMS Release

OrderNo.: 2012532

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 9 sample(s) on 12/10/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2012532

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 14

Project: CWMS Release

Collection Date: 12/4/2020

Lab ID: 2012532-001

Matrix: SOIL

Received Date: 12/10/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/14/2020 6:59:28 PM	56976
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	12/12/2020 10:59:41 AM	56935
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/12/2020 10:59:41 AM	56935
Surr: DNOP	115	30.4-154		%Rec	1	12/12/2020 10:59:41 AM	56935
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/13/2020 2:21:44 AM	56906
Surr: BFB	83.9	75.3-105		%Rec	1	12/13/2020 2:21:44 AM	56906
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	12/13/2020 2:21:44 AM	56906
Toluene	ND	0.050		mg/Kg	1	12/13/2020 2:21:44 AM	56906
Ethylbenzene	ND	0.050		mg/Kg	1	12/13/2020 2:21:44 AM	56906
Xylenes, Total	ND	0.099		mg/Kg	1	12/13/2020 2:21:44 AM	56906
Surr: 4-Bromofluorobenzene	86.0	80-120		%Rec	1	12/13/2020 2:21:44 AM	56906

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012532

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 15

Project: CWMS Release

Collection Date: 12/4/2020

Lab ID: 2012532-002

Matrix: SOIL

Received Date: 12/10/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/14/2020 7:11:52 PM	56976
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/12/2020 11:09:10 AM	56935
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/12/2020 11:09:10 AM	56935
Surr: DNOP	132	30.4-154		%Rec	1	12/12/2020 11:09:10 AM	56935
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/12/2020 4:19:02 PM	56929
Surr: BFB	91.2	75.3-105		%Rec	1	12/12/2020 4:19:02 PM	56929
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	12/12/2020 4:19:02 PM	56929
Toluene	ND	0.047		mg/Kg	1	12/12/2020 4:19:02 PM	56929
Ethylbenzene	ND	0.047		mg/Kg	1	12/12/2020 4:19:02 PM	56929
Xylenes, Total	ND	0.094		mg/Kg	1	12/12/2020 4:19:02 PM	56929
Surr: 4-Bromofluorobenzene	90.5	80-120		%Rec	1	12/12/2020 4:19:02 PM	56929

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012532

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 17

Project: CWMS Release

Collection Date: 12/4/2020

Lab ID: 2012532-003

Matrix: SOIL

Received Date: 12/10/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	59		mg/Kg	20	12/14/2020 7:24:16 PM	56976
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/12/2020 11:18:39 AM	56935
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/12/2020 11:18:39 AM	56935
Surr: DNOP	115	30.4-154		%Rec	1	12/12/2020 11:18:39 AM	56935
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/12/2020 5:29:03 PM	56929
Surr: BFB	91.0	75.3-105		%Rec	1	12/12/2020 5:29:03 PM	56929
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	12/12/2020 5:29:03 PM	56929
Toluene	ND	0.049		mg/Kg	1	12/12/2020 5:29:03 PM	56929
Ethylbenzene	ND	0.049		mg/Kg	1	12/12/2020 5:29:03 PM	56929
Xylenes, Total	ND	0.097		mg/Kg	1	12/12/2020 5:29:03 PM	56929
Surr: 4-Bromofluorobenzene	89.3	80-120		%Rec	1	12/12/2020 5:29:03 PM	56929

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012532

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 18

Project: CWMS Release

Collection Date: 12/4/2020

Lab ID: 2012532-004

Matrix: SOIL

Received Date: 12/10/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	61		mg/Kg	20	12/14/2020 7:36:40 PM	56976
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	12/12/2020 11:28:09 AM	56935
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/12/2020 11:28:09 AM	56935
Surr: DNOP	140	30.4-154		%Rec	1	12/12/2020 11:28:09 AM	56935
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/13/2020 2:44:38 AM	56929
Surr: BFB	83.4	75.3-105		%Rec	1	12/13/2020 2:44:38 AM	56929
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	12/13/2020 2:44:38 AM	56929
Toluene	ND	0.048		mg/Kg	1	12/13/2020 2:44:38 AM	56929
Ethylbenzene	ND	0.048		mg/Kg	1	12/13/2020 2:44:38 AM	56929
Xylenes, Total	ND	0.097		mg/Kg	1	12/13/2020 2:44:38 AM	56929
Surr: 4-Bromofluorobenzene	84.9	80-120		%Rec	1	12/13/2020 2:44:38 AM	56929

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012532

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 118 @ 4'

Project: CWMS Release

Collection Date: 12/7/2020

Lab ID: 2012532-005

Matrix: SOIL

Received Date: 12/10/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	300	60		mg/Kg	20	12/14/2020 7:49:05 PM	56976
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/12/2020 11:37:42 AM	56935
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/12/2020 11:37:42 AM	56935
Surr: DNOP	134	30.4-154		%Rec	1	12/12/2020 11:37:42 AM	56935
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/13/2020 3:07:36 AM	56929
Surr: BFB	84.0	75.3-105		%Rec	1	12/13/2020 3:07:36 AM	56929
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	12/13/2020 3:07:36 AM	56929
Toluene	ND	0.050		mg/Kg	1	12/13/2020 3:07:36 AM	56929
Ethylbenzene	ND	0.050		mg/Kg	1	12/13/2020 3:07:36 AM	56929
Xylenes, Total	ND	0.099		mg/Kg	1	12/13/2020 3:07:36 AM	56929
Surr: 4-Bromofluorobenzene	86.2	80-120		%Rec	1	12/13/2020 3:07:36 AM	56929

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012532

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 129 @ 4'

Project: CWMS Release

Collection Date: 12/7/2020

Lab ID: 2012532-006

Matrix: SOIL

Received Date: 12/10/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	540	61		mg/Kg	20	12/14/2020 8:01:30 PM	56976
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/12/2020 11:47:15 AM	56935
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/12/2020 11:47:15 AM	56935
Surr: DNOP	99.5	30.4-154		%Rec	1	12/12/2020 11:47:15 AM	56935
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/13/2020 4:16:23 AM	56929
Surr: BFB	83.1	75.3-105		%Rec	1	12/13/2020 4:16:23 AM	56929
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	12/13/2020 4:16:23 AM	56929
Toluene	ND	0.049		mg/Kg	1	12/13/2020 4:16:23 AM	56929
Ethylbenzene	ND	0.049		mg/Kg	1	12/13/2020 4:16:23 AM	56929
Xylenes, Total	ND	0.098		mg/Kg	1	12/13/2020 4:16:23 AM	56929
Surr: 4-Bromofluorobenzene	85.0	80-120		%Rec	1	12/13/2020 4:16:23 AM	56929

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012532

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 128 @ 4'

Project: CWMS Release

Collection Date: 12/7/2020

Lab ID: 2012532-007

Matrix: SOIL

Received Date: 12/10/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	150	60		mg/Kg	20	12/14/2020 9:03:32 PM	56991
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/12/2020 11:56:45 AM	56935
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/12/2020 11:56:45 AM	56935
Surr: DNOP	115	30.4-154		%Rec	1	12/12/2020 11:56:45 AM	56935
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/13/2020 4:39:16 AM	56929
Surr: BFB	84.0	75.3-105		%Rec	1	12/13/2020 4:39:16 AM	56929
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	12/13/2020 4:39:16 AM	56929
Toluene	ND	0.047		mg/Kg	1	12/13/2020 4:39:16 AM	56929
Ethylbenzene	ND	0.047		mg/Kg	1	12/13/2020 4:39:16 AM	56929
Xylenes, Total	ND	0.095		mg/Kg	1	12/13/2020 4:39:16 AM	56929
Surr: 4-Bromofluorobenzene	87.1	80-120		%Rec	1	12/13/2020 4:39:16 AM	56929

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012532

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 3

Project: CWMS Release

Collection Date: 12/7/2020

Lab ID: 2012532-008

Matrix: SOIL

Received Date: 12/10/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	61		mg/Kg	20	12/14/2020 9:15:56 PM	56991
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/12/2020 12:06:19 PM	56935
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/12/2020 12:06:19 PM	56935
Surr: DNOP	112	30.4-154		%Rec	1	12/12/2020 12:06:19 PM	56935
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/13/2020 5:02:13 AM	56929
Surr: BFB	81.9	75.3-105		%Rec	1	12/13/2020 5:02:13 AM	56929
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	12/13/2020 5:02:13 AM	56929
Toluene	ND	0.050		mg/Kg	1	12/13/2020 5:02:13 AM	56929
Ethylbenzene	ND	0.050		mg/Kg	1	12/13/2020 5:02:13 AM	56929
Xylenes, Total	ND	0.099		mg/Kg	1	12/13/2020 5:02:13 AM	56929
Surr: 4-Bromofluorobenzene	84.6	80-120		%Rec	1	12/13/2020 5:02:13 AM	56929

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012532

Date Reported: 12/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 1

Project: CWMS Release

Collection Date: 12/7/2020

Lab ID: 2012532-009

Matrix: SOIL

Received Date: 12/10/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/14/2020 9:28:20 PM	56991
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/12/2020 12:15:54 PM	56935
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/12/2020 12:15:54 PM	56935
Surr: DNOP	101	30.4-154		%Rec	1	12/12/2020 12:15:54 PM	56935
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/13/2020 5:25:09 AM	56929
Surr: BFB	82.2	75.3-105		%Rec	1	12/13/2020 5:25:09 AM	56929
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	12/13/2020 5:25:09 AM	56929
Toluene	ND	0.049		mg/Kg	1	12/13/2020 5:25:09 AM	56929
Ethylbenzene	ND	0.049		mg/Kg	1	12/13/2020 5:25:09 AM	56929
Xylenes, Total	ND	0.097		mg/Kg	1	12/13/2020 5:25:09 AM	56929
Surr: 4-Bromofluorobenzene	85.3	80-120		%Rec	1	12/13/2020 5:25:09 AM	56929

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012532

16-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-56976	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56976	RunNo: 73996								
Prep Date: 12/14/2020	Analysis Date: 12/14/2020	SeqNo: 2610588 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56976	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56976	RunNo: 73996								
Prep Date: 12/14/2020	Analysis Date: 12/14/2020	SeqNo: 2610589 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

Sample ID: MB-56991	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56991	RunNo: 73996								
Prep Date: 12/14/2020	Analysis Date: 12/14/2020	SeqNo: 2610620 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56991	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56991	RunNo: 73996								
Prep Date: 12/14/2020	Analysis Date: 12/14/2020	SeqNo: 2610621 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.4	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012532

16-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: LCS-56935	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 56935		RunNo: 73978							
Prep Date: 12/11/2020	Analysis Date: 12/12/2020		SeqNo: 2609489		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	5.5		5.000		109	30.4	154			

Sample ID: LCS-56944	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 56944		RunNo: 73978							
Prep Date: 12/11/2020	Analysis Date: 12/12/2020		SeqNo: 2609491		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		81.9	30.4	154			

Sample ID: LCS-56946	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 56946		RunNo: 73978							
Prep Date: 12/11/2020	Analysis Date: 12/12/2020		SeqNo: 2609492		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.1	30.4	154			

Sample ID: MB-56935	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 56935		RunNo: 73978							
Prep Date: 12/11/2020	Analysis Date: 12/12/2020		SeqNo: 2609493		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		123	30.4	154			

Sample ID: MB-56944	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 56944		RunNo: 73978							
Prep Date: 12/11/2020	Analysis Date: 12/12/2020		SeqNo: 2609495		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.9		10.00		88.9	30.4	154			

Sample ID: MB-56946	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 56946		RunNo: 73978							
Prep Date: 12/11/2020	Analysis Date: 12/12/2020		SeqNo: 2609496		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		93.1	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 11 of 15

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012532

16-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: 2012532-002ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: WW 15	Batch ID: 56929		RunNo: 73970							
Prep Date: 12/11/2020	Analysis Date: 12/12/2020		SeqNo: 2609014		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	24.90	0	118	61.3	114			S
Surr: BFB	1000		996.0		104	75.3	105			

Sample ID: 2012532-002amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: WW 15	Batch ID: 56929		RunNo: 73970							
Prep Date: 12/11/2020	Analysis Date: 12/12/2020		SeqNo: 2609015		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	4.8	24.20	0	123	61.3	114	1.67	20	S
Surr: BFB	1000		968.1		104	75.3	105	0	0	

Sample ID: lcs-56906	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 56906		RunNo: 73970							
Prep Date: 12/10/2020	Analysis Date: 12/12/2020		SeqNo: 2609029		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.8	72.5	106			
Surr: BFB	990		1000		99.2	75.3	105			

Sample ID: lcs-56929	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 56929		RunNo: 73970							
Prep Date: 12/11/2020	Analysis Date: 12/12/2020		SeqNo: 2609030		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	72.5	106			
Surr: BFB	990		1000		99.1	75.3	105			

Sample ID: mb-56906	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 56906		RunNo: 73970							
Prep Date: 12/10/2020	Analysis Date: 12/12/2020		SeqNo: 2609031		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		87.7	75.3	105			

Sample ID: mb-56929	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 56929		RunNo: 73970							
Prep Date: 12/11/2020	Analysis Date: 12/12/2020		SeqNo: 2609032		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2012532

16-Dec-20

Client: Mewbourne Oil Company

Project: CWMS Release

Sample ID: mb-56929		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS		Batch ID: 56929		RunNo: 73970							
Prep Date: 12/11/2020		Analysis Date: 12/12/2020		SeqNo: 2609032			Units: mg/Kg				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		ND	5.0								
Surr: BFB		890		1000		88.6	75.3	105			

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012532

16-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: 2012532-003ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: EW 17	Batch ID: 56929	RunNo: 73970								
Prep Date: 12/11/2020	Analysis Date: 12/12/2020	SeqNo: 2609067	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	0.9881	0	85.5	76.3	120			
Toluene	0.88	0.049	0.9881	0.01150	87.9	78.5	120			
Ethylbenzene	0.89	0.049	0.9881	0	89.9	78.1	124			
Xylenes, Total	2.7	0.099	2.964	0	89.5	79.3	125			
Surr: 4-Bromofluorobenzene	0.91		0.9881		92.0	80	120			

Sample ID: 2012532-003amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: EW 17	Batch ID: 56929	RunNo: 73970								
Prep Date: 12/11/2020	Analysis Date: 12/12/2020	SeqNo: 2609068	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.024	0.9569	0	81.6	76.3	120	7.84	20	
Toluene	0.83	0.048	0.9569	0.01150	85.3	78.5	120	6.03	20	
Ethylbenzene	0.83	0.048	0.9569	0	87.2	78.1	124	6.35	20	
Xylenes, Total	2.5	0.096	2.871	0	87.7	79.3	125	5.23	20	
Surr: 4-Bromofluorobenzene	0.86		0.9569		90.0	80	120	0	0	

Sample ID: LCS-56906	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 56906	RunNo: 73970								
Prep Date: 12/10/2020	Analysis Date: 12/12/2020	SeqNo: 2609081	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.9	80	120			
Toluene	0.98	0.050	1.000	0	97.8	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.3	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.1	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		90.1	80	120			

Sample ID: LCS-56929	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 56929	RunNo: 73970								
Prep Date: 12/11/2020	Analysis Date: 12/12/2020	SeqNo: 2609082	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.9	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		91.1	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012532

16-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

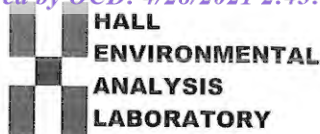
Sample ID: mb-56906	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 56906	RunNo: 73970								
Prep Date: 12/10/2020	Analysis Date: 12/12/2020	SeqNo: 2609083	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		88.1	80	120			

Sample ID: mb-56929	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 56929	RunNo: 73970								
Prep Date: 12/11/2020	Analysis Date: 12/12/2020	SeqNo: 2609084	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		87.4	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2012532

RcptNo: 1

Received By: Scott Anderson 12/10/2020 8:00:00 AM

Completed By: Desiree Dominguez 12/10/2020 10:06:29 AM

Reviewed By: JR 12/10/20

ID2

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(≤ 2 or >12 unless noted)

Adjusted?

Checked by: AS

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.7	Good				
2	0.1	Good				

Released to Imaging: 8/23/2021 11:37:48 AM

Turn-Around Time: 5 day rush

☒ Standard ☐ Rush

Project Name: CWMS RELEASE

Project #: 13296

Project Manager:
Lance Overshouse

Sampler: Leavel No. 1A
 On Ice: ☒ Yes ☐ No

of Coolers: 2(*) → SEE REMARKS

Cooler Temp (including CF): 11 (°C)

--	--	--

Container Type and #	Preservative Type	HEAL No. 2012532
-------------------------	----------------------	---------------------

[illegible]

Received By: [Signature] Via: Date: 12/9/20 Time: 1200

Received by:	Via:	Date	Time
SPA	Courier	12.10.20	8:00

Remarks:
Email results to $(*)$ ① $0.4 - 0.2 = 0.2$
pm@etechenvu.com ③ $0.3 - 0.2 = 0.1$



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

December 17, 2020

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX

RE: CWMS Release

OrderNo.: 2012610

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 10 sample(s) on 12/11/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2012610

Date Reported: 12/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 2

Project: CWMS Release

Collection Date: 12/8/2020

Lab ID: 2012610-001

Matrix: SOIL

Received Date: 12/11/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	61		mg/Kg	20	12/15/2020 7:11:35 AM	56992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/12/2020 9:12:41 PM	56944
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/12/2020 9:12:41 PM	56944
Surr: DNOP	86.9	30.4-154		%Rec	1	12/12/2020 9:12:41 PM	56944
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/14/2020 8:22:12 PM	56937
Surr: BFB	87.3	75.3-105		%Rec	1	12/14/2020 8:22:12 PM	56937
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	12/14/2020 8:22:12 PM	56937
Toluene	ND	0.047		mg/Kg	1	12/14/2020 8:22:12 PM	56937
Ethylbenzene	ND	0.047		mg/Kg	1	12/14/2020 8:22:12 PM	56937
Xylenes, Total	ND	0.094		mg/Kg	1	12/14/2020 8:22:12 PM	56937
Surr: 4-Bromofluorobenzene	88.0	80-120		%Rec	1	12/14/2020 8:22:12 PM	56937

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012610

Date Reported: 12/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 4

Project: CWMS Release

Collection Date: 12/8/2020

Lab ID: 2012610-002

Matrix: SOIL

Received Date: 12/11/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/15/2020 7:48:50 AM	56992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/12/2020 9:22:15 PM	56944
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/12/2020 9:22:15 PM	56944
Surr: DNOP	92.6	30.4-154		%Rec	1	12/12/2020 9:22:15 PM	56944
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/14/2020 8:45:19 PM	56937
Surr: BFB	87.7	75.3-105		%Rec	1	12/14/2020 8:45:19 PM	56937
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	12/14/2020 8:45:19 PM	56937
Toluene	ND	0.049		mg/Kg	1	12/14/2020 8:45:19 PM	56937
Ethylbenzene	ND	0.049		mg/Kg	1	12/14/2020 8:45:19 PM	56937
Xylenes, Total	ND	0.099		mg/Kg	1	12/14/2020 8:45:19 PM	56937
Surr: 4-Bromofluorobenzene	88.7	80-120		%Rec	1	12/14/2020 8:45:19 PM	56937

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012610

Date Reported: 12/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 3

Project: CWMS Release

Collection Date: 12/9/2020

Lab ID: 2012610-003

Matrix: SOIL

Received Date: 12/11/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	61		mg/Kg	20	12/15/2020 8:01:15 AM	56992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/12/2020 9:31:48 PM	56944
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/12/2020 9:31:48 PM	56944
Surr: DNOP	80.0	30.4-154		%Rec	1	12/12/2020 9:31:48 PM	56944
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/14/2020 9:08:23 PM	56937
Surr: BFB	86.7	75.3-105		%Rec	1	12/14/2020 9:08:23 PM	56937
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/14/2020 9:08:23 PM	56937
Toluene	ND	0.048		mg/Kg	1	12/14/2020 9:08:23 PM	56937
Ethylbenzene	ND	0.048		mg/Kg	1	12/14/2020 9:08:23 PM	56937
Xylenes, Total	ND	0.096		mg/Kg	1	12/14/2020 9:08:23 PM	56937
Surr: 4-Bromofluorobenzene	87.8	80-120		%Rec	1	12/14/2020 9:08:23 PM	56937

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012610

Date Reported: 12/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 5

Project: CWMS Release

Collection Date: 12/9/2020

Lab ID: 2012610-004

Matrix: SOIL

Received Date: 12/11/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/15/2020 8:13:39 AM	56992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/12/2020 10:09:53 PM	56946
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/12/2020 10:09:53 PM	56946
Surr: DNOP	93.6	30.4-154		%Rec	1	12/12/2020 10:09:53 PM	56946
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/14/2020 9:31:27 PM	56937
Surr: BFB	84.7	75.3-105		%Rec	1	12/14/2020 9:31:27 PM	56937
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/14/2020 9:31:27 PM	56937
Toluene	ND	0.049		mg/Kg	1	12/14/2020 9:31:27 PM	56937
Ethylbenzene	ND	0.049		mg/Kg	1	12/14/2020 9:31:27 PM	56937
Xylenes, Total	ND	0.098		mg/Kg	1	12/14/2020 9:31:27 PM	56937
Surr: 4-Bromofluorobenzene	85.7	80-120		%Rec	1	12/14/2020 9:31:27 PM	56937

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012610

Date Reported: 12/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 5

Project: CWMS Release

Collection Date: 12/9/2020

Lab ID: 2012610-005

Matrix: SOIL

Received Date: 12/11/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	91	60		mg/Kg	20	12/15/2020 8:26:03 AM	56992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/12/2020 10:38:16 PM	56946
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/12/2020 10:38:16 PM	56946
Surr: DNOP	84.9	30.4-154		%Rec	1	12/12/2020 10:38:16 PM	56946
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/14/2020 9:54:31 PM	56937
Surr: BFB	88.3	75.3-105		%Rec	1	12/14/2020 9:54:31 PM	56937
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/14/2020 9:54:31 PM	56937
Toluene	ND	0.048		mg/Kg	1	12/14/2020 9:54:31 PM	56937
Ethylbenzene	ND	0.048		mg/Kg	1	12/14/2020 9:54:31 PM	56937
Xylenes, Total	ND	0.095		mg/Kg	1	12/14/2020 9:54:31 PM	56937
Surr: 4-Bromofluorobenzene	89.1	80-120		%Rec	1	12/14/2020 9:54:31 PM	56937

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012610

Date Reported: 12/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 7

Project: CWMS Release

Collection Date: 12/9/2020

Lab ID: 2012610-006

Matrix: SOIL

Received Date: 12/11/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	72	59		mg/Kg	20	12/15/2020 9:03:16 AM	56992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/12/2020 10:47:41 PM	56946
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/12/2020 10:47:41 PM	56946
Surr: DNOP	107	30.4-154		%Rec	1	12/12/2020 10:47:41 PM	56946
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/14/2020 10:40:35 PM	56937
Surr: BFB	86.8	75.3-105		%Rec	1	12/14/2020 10:40:35 PM	56937
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/14/2020 10:40:35 PM	56937
Toluene	ND	0.048		mg/Kg	1	12/14/2020 10:40:35 PM	56937
Ethylbenzene	ND	0.048		mg/Kg	1	12/14/2020 10:40:35 PM	56937
Xylenes, Total	ND	0.096		mg/Kg	1	12/14/2020 10:40:35 PM	56937
Surr: 4-Bromofluorobenzene	87.2	80-120		%Rec	1	12/14/2020 10:40:35 PM	56937

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012610

Date Reported: 12/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 4

Project: CWMS Release

Collection Date: 12/9/2020

Lab ID: 2012610-007

Matrix: SOIL

Received Date: 12/11/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/15/2020 9:15:41 AM	56992
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/12/2020 10:57:06 PM	56946
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/12/2020 10:57:06 PM	56946
Surr: DNOP	85.4	30.4-154		%Rec	1	12/12/2020 10:57:06 PM	56946
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/14/2020 11:03:37 PM	56937
Surr: BFB	86.5	75.3-105		%Rec	1	12/14/2020 11:03:37 PM	56937
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	12/14/2020 11:03:37 PM	56937
Toluene	ND	0.046		mg/Kg	1	12/14/2020 11:03:37 PM	56937
Ethylbenzene	ND	0.046		mg/Kg	1	12/14/2020 11:03:37 PM	56937
Xylenes, Total	ND	0.092		mg/Kg	1	12/14/2020 11:03:37 PM	56937
Surr: 4-Bromofluorobenzene	87.3	80-120		%Rec	1	12/14/2020 11:03:37 PM	56937

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012610

Date Reported: 12/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 6

Project: CWMS Release

Collection Date: 12/9/2020

Lab ID: 2012610-008

Matrix: SOIL

Received Date: 12/11/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/15/2020 9:05:15 PM	57009
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/12/2020 11:06:26 PM	56946
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/12/2020 11:06:26 PM	56946
Surr: DNOP	86.2	30.4-154		%Rec	1	12/12/2020 11:06:26 PM	56946
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/15/2020 10:59:59 AM	56943
Surr: BFB	86.5	75.3-105		%Rec	1	12/15/2020 10:59:59 AM	56943
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/15/2020 10:59:59 AM	56943
Toluene	ND	0.047		mg/Kg	1	12/15/2020 10:59:59 AM	56943
Ethylbenzene	ND	0.047		mg/Kg	1	12/15/2020 10:59:59 AM	56943
Xylenes, Total	ND	0.094		mg/Kg	1	12/15/2020 10:59:59 AM	56943
Surr: 4-Bromofluorobenzene	89.3	80-120		%Rec	1	12/15/2020 10:59:59 AM	56943

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012610

Date Reported: 12/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 16

Project: CWMS Release

Collection Date: 12/9/2020

Lab ID: 2012610-009

Matrix: SOIL

Received Date: 12/11/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/15/2020 9:17:40 PM	57009
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/12/2020 11:15:45 PM	56946
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/12/2020 11:15:45 PM	56946
Surr: DNOP	89.3	30.4-154		%Rec	1	12/12/2020 11:15:45 PM	56946
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/15/2020 12:09:33 PM	56943
Surr: BFB	86.9	75.3-105		%Rec	1	12/15/2020 12:09:33 PM	56943
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	12/15/2020 12:09:33 PM	56943
Toluene	ND	0.046		mg/Kg	1	12/15/2020 12:09:33 PM	56943
Ethylbenzene	ND	0.046		mg/Kg	1	12/15/2020 12:09:33 PM	56943
Xylenes, Total	ND	0.091		mg/Kg	1	12/15/2020 12:09:33 PM	56943
Surr: 4-Bromofluorobenzene	89.9	80-120		%Rec	1	12/15/2020 12:09:33 PM	56943

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012610

Date Reported: 12/17/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 19

Project: CWMS Release

Collection Date: 12/9/2020

Lab ID: 2012610-010

Matrix: SOIL

Received Date: 12/11/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/15/2020 9:30:04 PM	57009
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/12/2020 11:25:02 PM	56946
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/12/2020 11:25:02 PM	56946
Surr: DNOP	90.5	30.4-154		%Rec	1	12/12/2020 11:25:02 PM	56946
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/15/2020 4:50:02 PM	56943
Surr: BFB	90.4	75.3-105		%Rec	1	12/15/2020 4:50:02 PM	56943
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	12/15/2020 4:50:02 PM	56943
Toluene	ND	0.047		mg/Kg	1	12/15/2020 4:50:02 PM	56943
Ethylbenzene	ND	0.047		mg/Kg	1	12/15/2020 4:50:02 PM	56943
Xylenes, Total	ND	0.093		mg/Kg	1	12/15/2020 4:50:02 PM	56943
Surr: 4-Bromofluorobenzene	92.2	80-120		%Rec	1	12/15/2020 4:50:02 PM	56943

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012610

17-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-56992	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56992	RunNo: 73996								
Prep Date: 12/14/2020	Analysis Date: 12/15/2020	SeqNo: 2610650 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56992	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56992	RunNo: 73996								
Prep Date: 12/14/2020	Analysis Date: 12/15/2020	SeqNo: 2610651 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.1	90	110			

Sample ID: MB-57009	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57009	RunNo: 74021								
Prep Date: 12/15/2020	Analysis Date: 12/15/2020	SeqNo: 2611788 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57009	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57009	RunNo: 74021								
Prep Date: 12/15/2020	Analysis Date: 12/15/2020	SeqNo: 2611789 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.3	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 11 of 17

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012610

17-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: LCS-56944	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 56944			RunNo: 73978						
Prep Date: 12/11/2020	Analysis Date: 12/12/2020			SeqNo: 2609491		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.9	70	130			
Surr: DNOP	4.1		5.000		81.9	30.4	154			

Sample ID: LCS-56946	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 56946			RunNo: 73978						
Prep Date: 12/11/2020	Analysis Date: 12/12/2020			SeqNo: 2609492		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.5	70	130			
Surr: DNOP	4.7		5.000		94.1	30.4	154			

Sample ID: MB-56944	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 56944			RunNo: 73978						
Prep Date: 12/11/2020	Analysis Date: 12/12/2020			SeqNo: 2609495		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.9		10.00		88.9	30.4	154			

Sample ID: MB-56946	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 56946			RunNo: 73978						
Prep Date: 12/11/2020	Analysis Date: 12/12/2020			SeqNo: 2609496		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.3		10.00		93.1	30.4	154			

Sample ID: 2012610-004AMS	SampType: MS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: SW 5	Batch ID: 56946			RunNo: 73978						
Prep Date: 12/11/2020	Analysis Date: 12/12/2020			SeqNo: 2609503		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	9.8	48.97	0	112	15	184			
Surr: DNOP	6.3		4.897		129	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2012610

17-Dec-20

Client: Mewbourne Oil Company

Project: CWMS Release

Sample ID: 2012610-004AMSD		SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: SW 5		Batch ID: 56946		RunNo: 73978						
Prep Date: 12/11/2020		Analysis Date: 12/12/2020		SeqNo: 2609504		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.2	45.87	0	82.2	15	184	36.8	23.9	R
Surr: DNOP	3.7		4.587		81.1	30.4	154	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012610

17-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-56937	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 56937			RunNo: 74001						
Prep Date: 12/11/2020	Analysis Date: 12/14/2020			SeqNo: 2610915		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	870		1000		87.3	75.3	105			

Sample ID: lcs-56937	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 56937			RunNo: 74001						
Prep Date: 12/11/2020	Analysis Date: 12/14/2020			SeqNo: 2610916		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.2	72.5	106			
Surr: BFB	990		1000		99.2	75.3	105			

Sample ID: mb-56943	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 56943			RunNo: 74018						
Prep Date: 12/11/2020	Analysis Date: 12/15/2020			SeqNo: 2611606		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	870		1000		87.0	75.3	105			

Sample ID: lcs-56943	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 56943			RunNo: 74018						
Prep Date: 12/11/2020	Analysis Date: 12/15/2020			SeqNo: 2611607		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.2	72.5	106			
Surr: BFB	990		1000		98.5	75.3	105			

Sample ID: 2012610-008ams	SampType: MS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: SW 6	Batch ID: 56943			RunNo: 74018						
Prep Date: 12/11/2020	Analysis Date: 12/15/2020			SeqNo: 2611609		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.8	23.99	0	104	61.3	114			
Surr: BFB	950		959.7		99.1	75.3	105			

Sample ID: 2012610-008amsd	SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: SW 6	Batch ID: 56943			RunNo: 74018						
Prep Date: 12/11/2020	Analysis Date: 12/15/2020			SeqNo: 2611610		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2012610
17-Dec-20

Client: Mewbourne Oil Company
Project: CWMS Release

Sample ID: 2012610-008amsd		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range						
Client ID: SW 6		Batch ID: 56943		RunNo: 74018						
Prep Date: 12/11/2020		Analysis Date: 12/15/2020		SeqNo: 2611610		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.68	0	93.6	61.3	114	7.56	20	
Surr: BFB	970		987.2		98.5	75.3	105	0	0	

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012610

17-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-56937	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 56937	RunNo: 74001								
Prep Date: 12/11/2020	Analysis Date: 12/14/2020	SeqNo: 2610962 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		89.4	80	120			

Sample ID: LCS-56937	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 56937	RunNo: 74001								
Prep Date: 12/11/2020	Analysis Date: 12/14/2020	SeqNo: 2610963 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	103	80	120			
Toluene	1.1	0.050	1.000	0	106	80	120			
Ethylbenzene	1.1	0.050	1.000	0	105	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		88.6	80	120			

Sample ID: mb-56943	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 56943	RunNo: 74018								
Prep Date: 12/11/2020	Analysis Date: 12/15/2020	SeqNo: 2611651 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		89.6	80	120			

Sample ID: LCS-56943	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 56943	RunNo: 74018								
Prep Date: 12/11/2020	Analysis Date: 12/15/2020	SeqNo: 2611652 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	100	80	120			
Toluene	1.1	0.050	1.000	0	105	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		89.7	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012610

17-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: 2012610-009ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: WW 16	Batch ID: 56943	RunNo: 74018								
Prep Date: 12/11/2020	Analysis Date: 12/15/2020	SeqNo: 2611655	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.024	0.9699	0	96.6	76.3	120			
Toluene	0.98	0.048	0.9699	0.009927	100	78.5	120			
Ethylbenzene	0.99	0.048	0.9699	0	102	78.1	124			
Xylenes, Total	2.9	0.097	2.910	0	101	79.3	125			
Surr: 4-Bromofluorobenzene	0.89		0.9699		92.1	80	120			

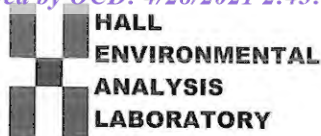
Sample ID: 2012610-009amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: WW 16	Batch ID: 56943	RunNo: 74018								
Prep Date: 12/11/2020	Analysis Date: 12/15/2020	SeqNo: 2611656	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.024	0.9785	0	98.5	76.3	120	2.76	20	
Toluene	1.0	0.049	0.9785	0.009927	103	78.5	120	3.54	20	
Ethylbenzene	1.0	0.049	0.9785	0	105	78.1	124	4.55	20	
Xylenes, Total	3.1	0.098	2.935	0	104	79.3	125	3.59	20	
Surr: 4-Bromofluorobenzene	0.91		0.9785		92.6	80	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 17 of 17



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2012610

RcptNo: 1

Received By: Cheyenne Cason 12/11/2020 8:00:00 AM

Completed By: Desiree Dominguez 12/11/2020 9:05:55 AM

Reviewed By: Em 12/11/20

DZ

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: JR 12/11/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.5	Good				
2	1.9	Good				
3	2.1	Good				
4	1.9	Good				

Chain-of-Custody Record

Client: Newbourne

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Project #:

Project Manager:

Sampler: heoral Mollus

On Ice: ☒ Yes ☐ No

of Coolers: 4

Cooler Temp (including CF): See Remarks (°C)Container
Type and #Preservative
Type

HEAL No.
2012610

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

Date:	Time: <u>10:00</u>
-------	--------------------

Relinquished by:

Received by:

Via:

Date	Time
------	------

Time

Remarks:

Date:	Time:
-------	-------

Relinquished by:

Received by:

Via:

Date	Time
------	------

Time

Email results to: PM@etechenv.com



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

December 22, 2020

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX

RE: CWMS Release

OrderNo.: 2012767

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 7 sample(s) on 12/16/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2012767

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 131 @ 4'

Project: CWMS Release

Collection Date: 12/10/2020

Lab ID: 2012767-001

Matrix: SOIL

Received Date: 12/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/21/2020 3:53:55 PM	57126
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/17/2020 9:21:42 PM	57038
Surr: BFB	104	70-130		%Rec	1	12/17/2020 9:21:42 PM	57038
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/17/2020 4:25:54 PM	57056
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/17/2020 4:25:54 PM	57056
Surr: DNOP	115	30.4-154		%Rec	1	12/17/2020 4:25:54 PM	57056
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	12/17/2020 9:21:42 PM	57038
Toluene	ND	0.049		mg/Kg	1	12/17/2020 9:21:42 PM	57038
Ethylbenzene	ND	0.049		mg/Kg	1	12/17/2020 9:21:42 PM	57038
Xylenes, Total	ND	0.098		mg/Kg	1	12/17/2020 9:21:42 PM	57038
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	12/17/2020 9:21:42 PM	57038
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	12/17/2020 9:21:42 PM	57038
Surr: Dibromofluoromethane	110	70-130		%Rec	1	12/17/2020 9:21:42 PM	57038
Surr: Toluene-d8	95.7	70-130		%Rec	1	12/17/2020 9:21:42 PM	57038

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012767

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 7

Project: CWMS Release

Collection Date: 12/10/2020

Lab ID: 2012767-002

Matrix: SOIL

Received Date: 12/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/21/2020 4:31:10 PM	57126
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/17/2020 9:50:13 PM	57038
Surr: BFB	104	70-130		%Rec	1	12/17/2020 9:50:13 PM	57038
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/17/2020 4:35:32 PM	57056
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/17/2020 4:35:32 PM	57056
Surr: DNOP	57.0	30.4-154		%Rec	1	12/17/2020 4:35:32 PM	57056
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	12/17/2020 9:50:13 PM	57038
Toluene	ND	0.048		mg/Kg	1	12/17/2020 9:50:13 PM	57038
Ethylbenzene	ND	0.048		mg/Kg	1	12/17/2020 9:50:13 PM	57038
Xylenes, Total	ND	0.095		mg/Kg	1	12/17/2020 9:50:13 PM	57038
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	12/17/2020 9:50:13 PM	57038
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/17/2020 9:50:13 PM	57038
Surr: Dibromofluoromethane	111	70-130		%Rec	1	12/17/2020 9:50:13 PM	57038
Surr: Toluene-d8	97.1	70-130		%Rec	1	12/17/2020 9:50:13 PM	57038

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012767

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 8

Project: CWMS Release

Collection Date: 12/10/2020

Lab ID: 2012767-003

Matrix: SOIL

Received Date: 12/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/21/2020 4:43:35 PM	57126
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/17/2020 10:18:46 PM	57038
Surr: BFB	108	70-130		%Rec	1	12/17/2020 10:18:46 PM	57038
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	12/17/2020 4:45:07 PM	57056
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	12/17/2020 4:45:07 PM	57056
Surr: DNOP	98.6	30.4-154		%Rec	1	12/17/2020 4:45:07 PM	57056
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	12/17/2020 10:18:46 PM	57038
Toluene	ND	0.049		mg/Kg	1	12/17/2020 10:18:46 PM	57038
Ethylbenzene	ND	0.049		mg/Kg	1	12/17/2020 10:18:46 PM	57038
Xylenes, Total	ND	0.099		mg/Kg	1	12/17/2020 10:18:46 PM	57038
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	12/17/2020 10:18:46 PM	57038
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	12/17/2020 10:18:46 PM	57038
Surr: Dibromofluoromethane	107	70-130		%Rec	1	12/17/2020 10:18:46 PM	57038
Surr: Toluene-d8	97.8	70-130		%Rec	1	12/17/2020 10:18:46 PM	57038

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012767

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 9

Project: CWMS Release

Collection Date: 12/10/2020

Lab ID: 2012767-004

Matrix: SOIL

Received Date: 12/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	61		mg/Kg	20	12/21/2020 4:56:00 PM	57126
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/17/2020 10:47:20 PM	57038
Surr: BFB	106	70-130		%Rec	1	12/17/2020 10:47:20 PM	57038
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/17/2020 4:54:38 PM	57056
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/17/2020 4:54:38 PM	57056
Surr: DNOP	74.6	30.4-154		%Rec	1	12/17/2020 4:54:38 PM	57056
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	12/17/2020 10:47:20 PM	57038
Toluene	ND	0.048		mg/Kg	1	12/17/2020 10:47:20 PM	57038
Ethylbenzene	ND	0.048		mg/Kg	1	12/17/2020 10:47:20 PM	57038
Xylenes, Total	ND	0.096		mg/Kg	1	12/17/2020 10:47:20 PM	57038
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	12/17/2020 10:47:20 PM	57038
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	12/17/2020 10:47:20 PM	57038
Surr: Dibromofluoromethane	109	70-130		%Rec	1	12/17/2020 10:47:20 PM	57038
Surr: Toluene-d8	98.0	70-130		%Rec	1	12/17/2020 10:47:20 PM	57038

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012767

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 6

Project: CWMS Release

Collection Date: 12/10/2020

Lab ID: 2012767-005

Matrix: SOIL

Received Date: 12/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	61	61		mg/Kg	20	12/21/2020 5:08:25 PM	57126
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/17/2020 11:15:56 PM	57038
Surr: BFB	105	70-130		%Rec	1	12/17/2020 11:15:56 PM	57038
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/17/2020 5:04:07 PM	57056
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/17/2020 5:04:07 PM	57056
Surr: DNOP	106	30.4-154		%Rec	1	12/17/2020 5:04:07 PM	57056
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	12/17/2020 11:15:56 PM	57038
Toluene	ND	0.049		mg/Kg	1	12/17/2020 11:15:56 PM	57038
Ethylbenzene	ND	0.049		mg/Kg	1	12/17/2020 11:15:56 PM	57038
Xylenes, Total	ND	0.098		mg/Kg	1	12/17/2020 11:15:56 PM	57038
Surr: 1,2-Dichloroethane-d4	99.8	70-130		%Rec	1	12/17/2020 11:15:56 PM	57038
Surr: 4-Bromofluorobenzene	99.5	70-130		%Rec	1	12/17/2020 11:15:56 PM	57038
Surr: Dibromofluoromethane	105	70-130		%Rec	1	12/17/2020 11:15:56 PM	57038
Surr: Toluene-d8	99.9	70-130		%Rec	1	12/17/2020 11:15:56 PM	57038

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012767

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 7

Project: CWMS Release

Collection Date: 12/10/2020

Lab ID: 2012767-006

Matrix: SOIL

Received Date: 12/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	70	60		mg/Kg	20	12/21/2020 5:20:50 PM	57126
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/18/2020 2:07:27 AM	57038
Surr: BFB	104	70-130		%Rec	1	12/18/2020 2:07:27 AM	57038
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	12/17/2020 5:13:34 PM	57056
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	12/17/2020 5:13:34 PM	57056
Surr: DNOP	90.6	30.4-154		%Rec	1	12/17/2020 5:13:34 PM	57056
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	12/18/2020 2:07:27 AM	57038
Toluene	ND	0.049		mg/Kg	1	12/18/2020 2:07:27 AM	57038
Ethylbenzene	ND	0.049		mg/Kg	1	12/18/2020 2:07:27 AM	57038
Xylenes, Total	ND	0.098		mg/Kg	1	12/18/2020 2:07:27 AM	57038
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	12/18/2020 2:07:27 AM	57038
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	12/18/2020 2:07:27 AM	57038
Surr: Dibromofluoromethane	107	70-130		%Rec	1	12/18/2020 2:07:27 AM	57038
Surr: Toluene-d8	99.0	70-130		%Rec	1	12/18/2020 2:07:27 AM	57038

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012767

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 8

Project: CWMS Release

Collection Date: 12/10/2020

Lab ID: 2012767-007

Matrix: SOIL

Received Date: 12/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	70	60		mg/Kg	20	12/21/2020 6:47:44 PM	57135
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/18/2020 2:35:57 AM	57038
Surr: BFB	99.9	70-130		%Rec	1	12/18/2020 2:35:57 AM	57038
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/17/2020 5:22:59 PM	57056
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/17/2020 5:22:59 PM	57056
Surr: DNOP	109	30.4-154		%Rec	1	12/17/2020 5:22:59 PM	57056
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	12/18/2020 2:35:57 AM	57038
Toluene	ND	0.049		mg/Kg	1	12/18/2020 2:35:57 AM	57038
Ethylbenzene	ND	0.049		mg/Kg	1	12/18/2020 2:35:57 AM	57038
Xylenes, Total	ND	0.098		mg/Kg	1	12/18/2020 2:35:57 AM	57038
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	12/18/2020 2:35:57 AM	57038
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	12/18/2020 2:35:57 AM	57038
Surr: Dibromofluoromethane	108	70-130		%Rec	1	12/18/2020 2:35:57 AM	57038
Surr: Toluene-d8	96.9	70-130		%Rec	1	12/18/2020 2:35:57 AM	57038

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012767

22-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57126	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57126	RunNo: 74164								
Prep Date: 12/21/2020	Analysis Date: 12/21/2020	SeqNo: 2617307 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57126	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57126	RunNo: 74164								
Prep Date: 12/21/2020	Analysis Date: 12/21/2020	SeqNo: 2617308 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.3	90	110			

Sample ID: MB-57135	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57135	RunNo: 74164								
Prep Date: 12/21/2020	Analysis Date: 12/21/2020	SeqNo: 2617341 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57135	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57135	RunNo: 74164								
Prep Date: 12/21/2020	Analysis Date: 12/21/2020	SeqNo: 2617342 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.3	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012767

22-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57056	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 57056	RunNo: 74076								
Prep Date: 12/16/2020	Analysis Date: 12/17/2020	SeqNo: 2614535	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		96.3	30.4	154			

Sample ID: LCS-57056	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 57056	RunNo: 74109								
Prep Date: 12/16/2020	Analysis Date: 12/18/2020	SeqNo: 2615356	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.7	70	130			
Surr: DNOP	5.1		5.000		101	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012767

22-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-57038	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 57038	RunNo: 74108								
Prep Date: 12/16/2020	Analysis Date: 12/17/2020	SeqNo: 2615361	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		101	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.7	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.51		0.5000		101	70	130			

Sample ID: lcs-57038	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 57038	RunNo: 74108								
Prep Date: 12/16/2020	Analysis Date: 12/17/2020	SeqNo: 2615362	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	107	80	120			
Toluene	1.1	0.050	1.000	0	105	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.3	0.10	3.000	0	111	80	120			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		107	70	130			
Surr: Toluene-d8	0.51		0.5000		101	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012767

22-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

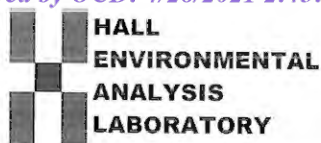
Sample ID: mb-57038	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 57038	RunNo: 74108								
Prep Date: 12/16/2020	Analysis Date: 12/17/2020	SeqNo: 2615408	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	530		500.0		107	70	130			

Sample ID: lcs-57038	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 57038	RunNo: 74108								
Prep Date: 12/16/2020	Analysis Date: 12/17/2020	SeqNo: 2615409	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.4	70	130			
Surr: BFB	520		500.0		104	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2012767

RcptNo: 1

Received By: Desiree Dominguez 12/16/2020 8:00:00 AM

Completed By: Emily Mocho 12/16/2020 8:30:45 AM

Reviewed By: SGL 12/16/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: gl 12/16/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Not Present			

Released to Imaging: 8/23/2021 11:37:48 AM

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

December 22, 2020

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX

RE: CWMS Release

OrderNo.: 2012863

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 6 sample(s) on 12/17/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2012863

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 10

Project: CWMS Release

Collection Date: 12/15/2020

Lab ID: 2012863-001

Matrix: SOIL

Received Date: 12/17/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/21/2020 7:49:46 PM	57135
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/19/2020 12:56:51 AM	57077
Surr: BFB	103	70-130		%Rec	1	12/19/2020 12:56:51 AM	57077
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/21/2020 10:41:49 AM	57097
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/21/2020 10:41:49 AM	57097
Surr: DNOP	109	30.4-154		%Rec	1	12/21/2020 10:41:49 AM	57097
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	12/19/2020 12:56:51 AM	57077
Toluene	ND	0.050		mg/Kg	1	12/19/2020 12:56:51 AM	57077
Ethylbenzene	ND	0.050		mg/Kg	1	12/19/2020 12:56:51 AM	57077
Xylenes, Total	ND	0.099		mg/Kg	1	12/19/2020 12:56:51 AM	57077
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	12/19/2020 12:56:51 AM	57077
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	12/19/2020 12:56:51 AM	57077
Surr: Dibromofluoromethane	109	70-130		%Rec	1	12/19/2020 12:56:51 AM	57077
Surr: Toluene-d8	96.5	70-130		%Rec	1	12/19/2020 12:56:51 AM	57077

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012863

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 17

Project: CWMS Release

Collection Date: 12/15/2020

Lab ID: 2012863-002

Matrix: SOIL

Received Date: 12/17/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	120	61		mg/Kg	20	12/21/2020 8:02:10 PM	57135
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/19/2020 1:34:49 PM	57077
Surr: BFB	102	70-130		%Rec	1	12/19/2020 1:34:49 PM	57077
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/21/2020 10:51:19 AM	57097
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/21/2020 10:51:19 AM	57097
Surr: DNOP	106	30.4-154		%Rec	1	12/21/2020 10:51:19 AM	57097
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	12/19/2020 1:34:49 PM	57077
Toluene	ND	0.048		mg/Kg	1	12/19/2020 1:34:49 PM	57077
Ethylbenzene	ND	0.048		mg/Kg	1	12/19/2020 1:34:49 PM	57077
Xylenes, Total	ND	0.096		mg/Kg	1	12/19/2020 1:34:49 PM	57077
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	12/19/2020 1:34:49 PM	57077
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	12/19/2020 1:34:49 PM	57077
Surr: Dibromofluoromethane	103	70-130		%Rec	1	12/19/2020 1:34:49 PM	57077
Surr: Toluene-d8	93.9	70-130		%Rec	1	12/19/2020 1:34:49 PM	57077

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012863

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 18

Project: CWMS Release

Collection Date: 12/15/2020

Lab ID: 2012863-003

Matrix: SOIL

Received Date: 12/17/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	61		mg/Kg	20	12/21/2020 8:14:35 PM	57135
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/19/2020 2:03:22 PM	57077
Surr: BFB	102	70-130		%Rec	1	12/19/2020 2:03:22 PM	57077
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/21/2020 11:00:48 AM	57097
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/21/2020 11:00:48 AM	57097
Surr: DNOP	106	30.4-154		%Rec	1	12/21/2020 11:00:48 AM	57097
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	12/19/2020 2:03:22 PM	57077
Toluene	ND	0.049		mg/Kg	1	12/19/2020 2:03:22 PM	57077
Ethylbenzene	ND	0.049		mg/Kg	1	12/19/2020 2:03:22 PM	57077
Xylenes, Total	ND	0.099		mg/Kg	1	12/19/2020 2:03:22 PM	57077
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	12/19/2020 2:03:22 PM	57077
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	12/19/2020 2:03:22 PM	57077
Surr: Dibromofluoromethane	105	70-130		%Rec	1	12/19/2020 2:03:22 PM	57077
Surr: Toluene-d8	94.3	70-130		%Rec	1	12/19/2020 2:03:22 PM	57077

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012863

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 20

Project: CWMS Release

Collection Date: 12/15/2020

Lab ID: 2012863-004

Matrix: SOIL

Received Date: 12/17/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/21/2020 8:51:50 PM	57135
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/19/2020 4:14:37 AM	57077
Surr: BFB	104	70-130		%Rec	1	12/19/2020 4:14:37 AM	57077
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/21/2020 11:10:21 AM	57097
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/21/2020 11:10:21 AM	57097
Surr: DNOP	94.5	30.4-154		%Rec	1	12/21/2020 11:10:21 AM	57097
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	12/19/2020 4:14:37 AM	57077
Toluene	ND	0.050		mg/Kg	1	12/19/2020 4:14:37 AM	57077
Ethylbenzene	ND	0.050		mg/Kg	1	12/19/2020 4:14:37 AM	57077
Xylenes, Total	ND	0.099		mg/Kg	1	12/19/2020 4:14:37 AM	57077
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%Rec	1	12/19/2020 4:14:37 AM	57077
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	12/19/2020 4:14:37 AM	57077
Surr: Dibromofluoromethane	104	70-130		%Rec	1	12/19/2020 4:14:37 AM	57077
Surr: Toluene-d8	97.5	70-130		%Rec	1	12/19/2020 4:14:37 AM	57077

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012863

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 21

Project: CWMS Release

Collection Date: 12/15/2020

Lab ID: 2012863-005

Matrix: SOIL

Received Date: 12/17/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/21/2020 9:04:15 PM	57135
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/19/2020 4:42:54 AM	57077
Surr: BFB	101	70-130		%Rec	1	12/19/2020 4:42:54 AM	57077
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	12/21/2020 11:19:53 AM	57097
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/21/2020 11:19:53 AM	57097
Surr: DNOP	98.2	30.4-154		%Rec	1	12/21/2020 11:19:53 AM	57097
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	12/19/2020 4:42:54 AM	57077
Toluene	ND	0.049		mg/Kg	1	12/19/2020 4:42:54 AM	57077
Ethylbenzene	ND	0.049		mg/Kg	1	12/19/2020 4:42:54 AM	57077
Xylenes, Total	ND	0.099		mg/Kg	1	12/19/2020 4:42:54 AM	57077
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	12/19/2020 4:42:54 AM	57077
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	12/19/2020 4:42:54 AM	57077
Surr: Dibromofluoromethane	105	70-130		%Rec	1	12/19/2020 4:42:54 AM	57077
Surr: Toluene-d8	95.6	70-130		%Rec	1	12/19/2020 4:42:54 AM	57077

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012863

Date Reported: 12/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 22

Project: CWMS Release

Collection Date: 12/15/2020

Lab ID: 2012863-006

Matrix: SOIL

Received Date: 12/17/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/21/2020 9:16:39 PM	57135
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/19/2020 5:11:10 AM	57077
Surr: BFB	105	70-130		%Rec	1	12/19/2020 5:11:10 AM	57077
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/21/2020 11:29:26 AM	57097
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/21/2020 11:29:26 AM	57097
Surr: DNOP	100	30.4-154		%Rec	1	12/21/2020 11:29:26 AM	57097
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	12/19/2020 5:11:10 AM	57077
Toluene	ND	0.049		mg/Kg	1	12/19/2020 5:11:10 AM	57077
Ethylbenzene	ND	0.049		mg/Kg	1	12/19/2020 5:11:10 AM	57077
Xylenes, Total	ND	0.099		mg/Kg	1	12/19/2020 5:11:10 AM	57077
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	12/19/2020 5:11:10 AM	57077
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	12/19/2020 5:11:10 AM	57077
Surr: Dibromofluoromethane	104	70-130		%Rec	1	12/19/2020 5:11:10 AM	57077
Surr: Toluene-d8	97.6	70-130		%Rec	1	12/19/2020 5:11:10 AM	57077

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2012863

22-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57135	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57135	RunNo: 74164								
Prep Date: 12/21/2020	Analysis Date: 12/21/2020	SeqNo: 2617341	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57135	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57135	RunNo: 74164								
Prep Date: 12/21/2020	Analysis Date: 12/21/2020	SeqNo: 2617342	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.3	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012863

22-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: LCS-57097	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 57097		RunNo: 74169							
Prep Date: 12/18/2020	Analysis Date: 12/21/2020		SeqNo: 2617542		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.4	70	130			
Surr: DNOP	5.5		5.000		110	30.4	154			

Sample ID: MB-57097	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 57097		RunNo: 74169							
Prep Date: 12/18/2020	Analysis Date: 12/21/2020		SeqNo: 2617545		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		110	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 8 of 10

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012863

22-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-57077	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 57077	RunNo: 74129								
Prep Date: 12/17/2020	Analysis Date: 12/18/2020	SeqNo: 2615828	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		105	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.50		0.5000		99.0	70	130			

Sample ID: lcs-57077	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 57077	RunNo: 74129								
Prep Date: 12/17/2020	Analysis Date: 12/18/2020	SeqNo: 2615829	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	105	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.3	0.10	3.000	0	109	80	120			
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		106	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.8	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.49		0.5000		97.7	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012863

22-Dec-20

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-57077	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 57077	RunNo: 74129								
Prep Date: 12/17/2020	Analysis Date: 12/18/2020	SeqNo: 2615842		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	530		500.0		106	70	130			

Sample ID: lcs-57077	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 57077	RunNo: 74129								
Prep Date: 12/17/2020	Analysis Date: 12/18/2020	SeqNo: 2615843		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.4	70	130			
Surr: BFB	520		500.0		104	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2012863

RcptNo: 1

Received By: Erin Melendrez 12/17/2020 8:30:00 AM

Completed By: Erin Melendrez 12/17/2020 8:58:10 AM

Reviewed By: JR 12/17/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: SGL 12/17/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good				



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

January 05, 2021

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX:

RE: CWMS Release

OrderNo.: 2012C33

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 7 sample(s) on 12/29/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2012C33

Date Reported: 1/5/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 19B

Project: CWMS Release

Collection Date: 12/16/2020

Lab ID: 2012C33-001

Matrix: SOIL

Received Date: 12/29/2020 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/31/2020 12:57:22 AM	57288
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/31/2020 11:50:03 AM	57276
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2020 11:50:03 AM	57276
Surr: DNOP	122	30.4-154		%Rec	1	12/31/2020 11:50:03 AM	57276
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	12/30/2020 6:37:46 PM	57257
Surr: BFB	95.2	75.3-105	H	%Rec	1	12/30/2020 6:37:46 PM	57257
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024	H	mg/Kg	1	12/30/2020 6:37:46 PM	57257
Toluene	ND	0.049	H	mg/Kg	1	12/30/2020 6:37:46 PM	57257
Ethylbenzene	ND	0.049	H	mg/Kg	1	12/30/2020 6:37:46 PM	57257
Xylenes, Total	ND	0.097	H	mg/Kg	1	12/30/2020 6:37:46 PM	57257
Surr: 4-Bromofluorobenzene	114	80-120	H	%Rec	1	12/30/2020 6:37:46 PM	57257

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012C33

Date Reported: 1/5/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 18B

Project: CWMS Release

Collection Date: 12/16/2020

Lab ID: 2012C33-002

Matrix: SOIL

Received Date: 12/29/2020 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	12/31/2020 1:09:47 AM	57288
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/31/2020 1:02:08 PM	57276
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2020 1:02:08 PM	57276
Surr: DNOP	86.9	30.4-154		%Rec	1	12/31/2020 1:02:08 PM	57276
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	12/30/2020 7:01:20 PM	57257
Surr: BFB	96.5	75.3-105	H	%Rec	1	12/30/2020 7:01:20 PM	57257
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025	H	mg/Kg	1	12/30/2020 7:01:20 PM	57257
Toluene	ND	0.049	H	mg/Kg	1	12/30/2020 7:01:20 PM	57257
Ethylbenzene	ND	0.049	H	mg/Kg	1	12/30/2020 7:01:20 PM	57257
Xylenes, Total	ND	0.099	H	mg/Kg	1	12/30/2020 7:01:20 PM	57257
Surr: 4-Bromofluorobenzene	114	80-120	H	%Rec	1	12/30/2020 7:01:20 PM	57257

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012C33

Date Reported: 1/5/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 22

Project: CWMS Release

Collection Date: 12/28/2020

Lab ID: 2012C33-003

Matrix: SOIL

Received Date: 12/29/2020 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	110	60		mg/Kg	20	1/4/2021 9:23:16 AM	57297
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/31/2020 1:26:08 PM	57276
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/31/2020 1:26:08 PM	57276
Surr: DNOP	63.2	30.4-154		%Rec	1	12/31/2020 1:26:08 PM	57276
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2020 9:23:05 PM	57260
Surr: BFB	95.2	75.3-105		%Rec	1	12/30/2020 9:23:05 PM	57260
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	12/30/2020 9:23:05 PM	57260
Toluene	ND	0.050		mg/Kg	1	12/30/2020 9:23:05 PM	57260
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2020 9:23:05 PM	57260
Xylenes, Total	ND	0.099		mg/Kg	1	12/30/2020 9:23:05 PM	57260
Surr: 4-Bromofluorobenzene	113	80-120		%Rec	1	12/30/2020 9:23:05 PM	57260

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012C33

Date Reported: 1/5/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 23

Project: CWMS Release

Collection Date: 12/28/2020

Lab ID: 2012C33-004

Matrix: SOIL

Received Date: 12/29/2020 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	90	60		mg/Kg	20	1/4/2021 10:00:29 AM	57297
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/31/2020 1:50:09 PM	57276
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/31/2020 1:50:09 PM	57276
Surr: DNOP	68.6	30.4-154		%Rec	1	12/31/2020 1:50:09 PM	57276
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/30/2020 10:33:22 PM	57260
Surr: BFB	95.6	75.3-105		%Rec	1	12/30/2020 10:33:22 PM	57260
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	12/30/2020 10:33:22 PM	57260
Toluene	ND	0.047		mg/Kg	1	12/30/2020 10:33:22 PM	57260
Ethylbenzene	ND	0.047		mg/Kg	1	12/30/2020 10:33:22 PM	57260
Xylenes, Total	ND	0.093		mg/Kg	1	12/30/2020 10:33:22 PM	57260
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	12/30/2020 10:33:22 PM	57260

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012C33

Date Reported: 1/5/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 20

Project: CWMS Release

Collection Date: 12/28/2020

Lab ID: 2012C33-005

Matrix: SOIL

Received Date: 12/29/2020 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	1/4/2021 10:37:42 AM	57297
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/31/2020 2:14:12 PM	57276
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2020 2:14:12 PM	57276
Surr: DNOP	69.7	30.4-154		%Rec	1	12/31/2020 2:14:12 PM	57276
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/30/2020 11:44:31 PM	57260
Surr: BFB	95.8	75.3-105		%Rec	1	12/30/2020 11:44:31 PM	57260
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/30/2020 11:44:31 PM	57260
Toluene	ND	0.048		mg/Kg	1	12/30/2020 11:44:31 PM	57260
Ethylbenzene	ND	0.048		mg/Kg	1	12/30/2020 11:44:31 PM	57260
Xylenes, Total	ND	0.096		mg/Kg	1	12/30/2020 11:44:31 PM	57260
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	12/30/2020 11:44:31 PM	57260

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012C33

Date Reported: 1/5/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 24

Project: CWMS Release

Collection Date: 12/28/2020

Lab ID: 2012C33-006

Matrix: SOIL

Received Date: 12/29/2020 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	76	61		mg/Kg	20	1/4/2021 10:50:07 AM	57297
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/31/2020 2:38:14 PM	57276
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/31/2020 2:38:14 PM	57276
Surr: DNOP	76.1	30.4-154		%Rec	1	12/31/2020 2:38:14 PM	57276
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/31/2020 12:07:51 AM	57260
Surr: BFB	96.7	75.3-105		%Rec	1	12/31/2020 12:07:51 AM	57260
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	12/31/2020 12:07:51 AM	57260
Toluene	ND	0.046		mg/Kg	1	12/31/2020 12:07:51 AM	57260
Ethylbenzene	ND	0.046		mg/Kg	1	12/31/2020 12:07:51 AM	57260
Xylenes, Total	ND	0.092		mg/Kg	1	12/31/2020 12:07:51 AM	57260
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	12/31/2020 12:07:51 AM	57260

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012C33

Date Reported: 1/5/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 21

Project: CWMS Release

Collection Date: 12/28/2020

Lab ID: 2012C33-007

Matrix: SOIL

Received Date: 12/29/2020 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	1/4/2021 11:02:32 AM	57297
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/31/2020 3:02:13 PM	57276
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/31/2020 3:02:13 PM	57276
Surr: DNOP	65.4	30.4-154		%Rec	1	12/31/2020 3:02:13 PM	57276
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/31/2020 12:31:12 AM	57260
Surr: BFB	93.5	75.3-105		%Rec	1	12/31/2020 12:31:12 AM	57260
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	12/31/2020 12:31:12 AM	57260
Toluene	ND	0.047		mg/Kg	1	12/31/2020 12:31:12 AM	57260
Ethylbenzene	ND	0.047		mg/Kg	1	12/31/2020 12:31:12 AM	57260
Xylenes, Total	ND	0.093		mg/Kg	1	12/31/2020 12:31:12 AM	57260
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	12/31/2020 12:31:12 AM	57260

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012C33

05-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57288	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57288	RunNo: 74331								
Prep Date: 12/30/2020	Analysis Date: 12/30/2020	SeqNo: 2624124	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57288	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57288	RunNo: 74331								
Prep Date: 12/30/2020	Analysis Date: 12/30/2020	SeqNo: 2624125	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	110			

Sample ID: MB-57297	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57297	RunNo: 74345								
Prep Date: 12/31/2020	Analysis Date: 12/31/2020	SeqNo: 2625004	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57297	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57297	RunNo: 74345								
Prep Date: 12/31/2020	Analysis Date: 12/31/2020	SeqNo: 2625005	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012C33

05-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57276	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 57276	RunNo: 74362								
Prep Date: 12/30/2020	Analysis Date: 12/31/2020	SeqNo: 2625215 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	13		10.00		128	30.4	154			

Sample ID: LCS-57276	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 57276	RunNo: 74362								
Prep Date: 12/30/2020	Analysis Date: 12/31/2020	SeqNo: 2625217 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	10	50.00	0	118	68.9	141			
Surr: DNOP	6.4		5.000		128	30.4	154			

Sample ID: 2012C33-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WW 19B	Batch ID: 57276	RunNo: 74362								
Prep Date: 12/30/2020	Analysis Date: 12/31/2020	SeqNo: 2625219 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	62	10	49.80	0	124	15	184			
Surr: DNOP	6.5		4.980		131	30.4	154			

Sample ID: 2012C33-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WW 19B	Batch ID: 57276	RunNo: 74362								
Prep Date: 12/30/2020	Analysis Date: 12/31/2020	SeqNo: 2625220 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	9.9	49.36	0	119	15	184	5.80	23.9	
Surr: DNOP	5.0		4.936		101	30.4	154	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012C33

05-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-57257	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 57257	RunNo: 74329								
Prep Date: 12/29/2020	Analysis Date: 12/30/2020	SeqNo: 2623885 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		96.8	75.3	105			

Sample ID: lcs-57257	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 57257	RunNo: 74329								
Prep Date: 12/29/2020	Analysis Date: 12/30/2020	SeqNo: 2623886 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	72.5	106			
Surr: BFB	1100		1000		107	75.3	105			S

Sample ID: mb-57260	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 57260	RunNo: 74329								
Prep Date: 12/29/2020	Analysis Date: 12/30/2020	SeqNo: 2623909 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.1	75.3	105			

Sample ID: lcs-57260	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 57260	RunNo: 74329								
Prep Date: 12/29/2020	Analysis Date: 12/30/2020	SeqNo: 2623910 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.8	72.5	106			
Surr: BFB	1100		1000		105	75.3	105			S

Sample ID: 2012c33-003ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WW 22	Batch ID: 57260	RunNo: 74329								
Prep Date: 12/29/2020	Analysis Date: 12/30/2020	SeqNo: 2623912 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.37	0	106	61.3	114			
Surr: BFB	1000		974.7		107	75.3	105			S

Sample ID: 2012c33-003amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WW 22	Batch ID: 57260	RunNo: 74329								
Prep Date: 12/29/2020	Analysis Date: 12/30/2020	SeqNo: 2623913 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2012C33

05-Jan-21

Client: Mewbourne Oil Company

Project: CWMS Release

Sample ID: 2012c33-003amsd		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range						
Client ID: WW 22		Batch ID: 57260		RunNo: 74329						
Prep Date: 12/29/2020		Analysis Date: 12/30/2020		SeqNo: 2623913		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.8	24.20	0	109	61.3	114	1.70	20	
Surr: BFB	1000		968.1		107	75.3	105	0	0	S

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012C33

05-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-57257	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 57257		RunNo: 74329							
Prep Date: 12/29/2020	Analysis Date: 12/30/2020		SeqNo: 2623937		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		115	80	120			

Sample ID: LCS-57257	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 57257		RunNo: 74329							
Prep Date: 12/29/2020	Analysis Date: 12/30/2020		SeqNo: 2623942		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.3	80	120			
Toluene	0.94	0.050	1.000	0	94.1	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.8	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.4	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		115	80	120			

Sample ID: mb-57260	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 57260		RunNo: 74329							
Prep Date: 12/29/2020	Analysis Date: 12/30/2020		SeqNo: 2623972		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID: LCS-57260	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 57260		RunNo: 74329							
Prep Date: 12/29/2020	Analysis Date: 12/30/2020		SeqNo: 2623973		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.4	80	120			
Toluene	0.96	0.050	1.000	0	96.5	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.0	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012C33

05-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

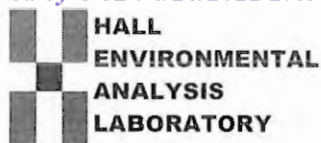
Sample ID: 2012c33-004ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: EW 23	Batch ID: 57260	RunNo: 74329								
Prep Date: 12/29/2020	Analysis Date: 12/30/2020	SeqNo: 2623976	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9950	0	103	76.3	120			
Toluene	1.1	0.050	0.9950	0.007907	107	78.5	120			
Ethylbenzene	1.1	0.050	0.9950	0	109	78.1	124			
Xylenes, Total	3.3	0.10	2.985	0	110	79.3	125			
Surr: 4-Bromofluorobenzene	1.2		0.9950		116	80	120			

Sample ID: 2012c33-004amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: EW 23	Batch ID: 57260	RunNo: 74329								
Prep Date: 12/29/2020	Analysis Date: 12/30/2020	SeqNo: 2623977	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9980	0	100	76.3	120	2.27	20	
Toluene	1.1	0.050	0.9980	0.007907	105	78.5	120	1.19	20	
Ethylbenzene	1.1	0.050	0.9980	0	108	78.1	124	0.170	20	
Xylenes, Total	3.3	0.10	2.994	0	111	79.3	125	1.03	20	
Surr: 4-Bromofluorobenzene	1.1		0.9980		114	80	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2012C33

RcptNo: 1

Received By: Isaiah Ortiz 12/29/2020 7:35:00 AM

I-OK

Completed By: Isaiah Ortiz 12/29/2020 8:09:39 AM

I-OK

Reviewed By: EM 12/29/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: JR 12/29/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Not Present			
2	1.1	Good	Not Present			

Released to Imaging: 8/23/2021 11:37:48 AM

Turn-Around Time: 5 days

Project Name: CWMS Release

Project #:
13296


Project Manager:

Lance Crenshaw

Sampler: Leonel Moïça

On Ice: ☒ Yes ☐ No

of Coolers: 7 $0.8^{\circ} \pm 0$ Cooler Temp (including CF): $1.1^{\circ} \pm 0$ ($^{\circ}\text{C}$)[illegible]

Received by: 	Via:	Date	Time
		12/28/20	1800

Received by: Tracy Via: cover Date: 12/29/20 Time: 0735

Remarks:	Page 238 of 3
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HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Received by OCD: 4/28/2021 2:43:51 PM

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

January 06, 2021

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX

RE: CWMS Release

OrderNo.: 2012D30

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 5 sample(s) on 12/31/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2012D30

Date Reported: 1/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW10

Project: CWMS Release

Collection Date: 12/30/2020

Lab ID: 2012D30-001

Matrix: SOIL

Received Date: 12/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	59		mg/Kg	20	1/5/2021 8:07:58 PM	57362
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/5/2021 10:02:03 AM	57320
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/5/2021 10:02:03 AM	57320
Surr: DNOP	70.4	30.4-154		%Rec	1	1/5/2021 10:02:03 AM	57320
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/4/2021 2:45:25 PM	57303
Surr: BFB	97.0	75.3-105		%Rec	1	1/4/2021 2:45:25 PM	57303
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/4/2021 2:45:25 PM	57303
Toluene	ND	0.049		mg/Kg	1	1/4/2021 2:45:25 PM	57303
Ethylbenzene	ND	0.049		mg/Kg	1	1/4/2021 2:45:25 PM	57303
Xylenes, Total	ND	0.099		mg/Kg	1	1/4/2021 2:45:25 PM	57303
Surr: 4-Bromofluorobenzene	116	80-120		%Rec	1	1/4/2021 2:45:25 PM	57303

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012D30

Date Reported: 1/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW11

Project: CWMS Release

Collection Date: 12/30/2020

Lab ID: 2012D30-002

Matrix: SOIL

Received Date: 12/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	110	60		mg/Kg	20	1/5/2021 8:45:12 PM	57362
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/5/2021 10:25:49 AM	57320
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/5/2021 10:25:49 AM	57320
Surr: DNOP	74.3	30.4-154		%Rec	1	1/5/2021 10:25:49 AM	57320
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/4/2021 3:55:18 PM	57303
Surr: BFB	94.1	75.3-105		%Rec	1	1/4/2021 3:55:18 PM	57303
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	1/4/2021 3:55:18 PM	57303
Toluene	ND	0.049		mg/Kg	1	1/4/2021 3:55:18 PM	57303
Ethylbenzene	ND	0.049		mg/Kg	1	1/4/2021 3:55:18 PM	57303
Xylenes, Total	ND	0.098		mg/Kg	1	1/4/2021 3:55:18 PM	57303
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	1/4/2021 3:55:18 PM	57303

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012D30

Date Reported: 1/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW25

Project: CWMS Release

Collection Date: 12/30/2020

Lab ID: 2012D30-003

Matrix: SOIL

Received Date: 12/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	1/5/2021 8:57:36 PM	57362
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/5/2021 10:49:30 AM	57320
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/5/2021 10:49:30 AM	57320
Surr: DNOP	78.9	30.4-154		%Rec	1	1/5/2021 10:49:30 AM	57320
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/4/2021 4:18:47 PM	57303
Surr: BFB	92.8	75.3-105		%Rec	1	1/4/2021 4:18:47 PM	57303
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/4/2021 4:18:47 PM	57303
Toluene	ND	0.049		mg/Kg	1	1/4/2021 4:18:47 PM	57303
Ethylbenzene	ND	0.049		mg/Kg	1	1/4/2021 4:18:47 PM	57303
Xylenes, Total	ND	0.099		mg/Kg	1	1/4/2021 4:18:47 PM	57303
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	1/4/2021 4:18:47 PM	57303

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2012D30

Date Reported: 1/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 156 @ 4'

Project: CWMS Release

Collection Date: 12/30/2020

Lab ID: 2012D30-004

Matrix: SOIL

Received Date: 12/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	1/5/2021 9:10:01 PM	57362
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/5/2021 11:13:15 AM	57320
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/5/2021 11:13:15 AM	57320
Surr: DNOP	69.6	30.4-154		%Rec	1	1/5/2021 11:13:15 AM	57320
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/4/2021 4:42:22 PM	57303
Surr: BFB	90.6	75.3-105		%Rec	1	1/4/2021 4:42:22 PM	57303
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/4/2021 4:42:22 PM	57303
Toluene	ND	0.049		mg/Kg	1	1/4/2021 4:42:22 PM	57303
Ethylbenzene	ND	0.049		mg/Kg	1	1/4/2021 4:42:22 PM	57303
Xylenes, Total	ND	0.098		mg/Kg	1	1/4/2021 4:42:22 PM	57303
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	1/4/2021 4:42:22 PM	57303

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2012D30

Date Reported: 1/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 155 @ 4'

Project: CWMS Release

Collection Date: 12/30/2020

Lab ID: 2012D30-005

Matrix: SOIL

Received Date: 12/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	1/5/2021 9:22:25 PM	57362
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/5/2021 11:37:02 AM	57320
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/5/2021 11:37:02 AM	57320
Surr: DNOP	81.1	30.4-154		%Rec	1	1/5/2021 11:37:02 AM	57320
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/4/2021 5:05:57 PM	57303
Surr: BFB	91.0	75.3-105		%Rec	1	1/4/2021 5:05:57 PM	57303
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/4/2021 5:05:57 PM	57303
Toluene	ND	0.050		mg/Kg	1	1/4/2021 5:05:57 PM	57303
Ethylbenzene	ND	0.050		mg/Kg	1	1/4/2021 5:05:57 PM	57303
Xylenes, Total	ND	0.099		mg/Kg	1	1/4/2021 5:05:57 PM	57303
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	1/4/2021 5:05:57 PM	57303

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012D30

06-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57362	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57362	RunNo: 74410								
Prep Date: 1/5/2021	Analysis Date: 1/5/2021	SeqNo: 2627148	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57362	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57362	RunNo: 74410								
Prep Date: 1/5/2021	Analysis Date: 1/5/2021	SeqNo: 2627149	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.8	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012D30

06-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: LCS-57320	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 57320			RunNo: 74381						
Prep Date: 1/4/2021	Analysis Date: 1/5/2021			SeqNo: 2625833		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.5	68.9	141			
Surr: DNOP	4.4		5.000		88.6	30.4	154			

Sample ID: MB-57320	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 57320			RunNo: 74381						
Prep Date: 1/4/2021	Analysis Date: 1/5/2021			SeqNo: 2625834		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.7	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012D30

06-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-57303	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 57303	RunNo: 74360								
Prep Date: 1/2/2021	Analysis Date: 1/4/2021	SeqNo: 2625528	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.3	75.3	105			

Sample ID: lcs-57303	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 57303	RunNo: 74360								
Prep Date: 1/2/2021	Analysis Date: 1/4/2021	SeqNo: 2625529	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.7	72.5	106			
Surr: BFB	1100		1000		105	75.3	105			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012D30

06-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-57303	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 57303	RunNo: 74360								
Prep Date: 1/2/2021	Analysis Date: 1/4/2021	SeqNo: 2625560	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Sample ID: LCS-57303	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 57303	RunNo: 74360								
Prep Date: 1/2/2021	Analysis Date: 1/4/2021	SeqNo: 2625561	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.2	80	120			
Toluene	0.91	0.050	1.000	0	91.4	80	120			
Ethylbenzene	0.91	0.050	1.000	0	91.3	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.8	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **Mewbourne Oil Company**Work Order Number: **2012D30**

RcptNo: 1

Received By: **Sean Livingston**

12/31/2020 9:55:00 AM

Completed By: **Isaiah Ortiz**

12/31/2020 10:02:13 AM

Reviewed By: **SGC 12/31/20**

SGC
IOX

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? FedEx

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *JR 12/31/20*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Not Present			



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

January 27, 2021

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX

RE: CWMS Release

OrderNo.: 2101235

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 158 sample(s) on 1/7/2021 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued January 15, 2021.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL88 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-001

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2500	150		mg/Kg	50	1/9/2021 4:05:13 PM	57412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 2 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-002

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2300	60		mg/Kg	20	1/8/2021 5:57:07 AM	57412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 13 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-003

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3400	150		mg/Kg	50	1/9/2021 4:17:37 PM	57412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 15 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-004

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4300	150		mg/Kg	50	1/9/2021 4:30:01 PM	57412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 18 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-005

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	6500	300		mg/Kg	100	1/14/2021 2:05:00 PM	57412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 23 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-006

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4100	150		mg/Kg	50	1/9/2021 5:19:40 PM	57412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 29 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-007

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	6200	300		mg/Kg	100	1/9/2021 5:32:05 PM	57412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 34 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-008

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2100	60		mg/Kg	20	1/8/2021 8:01:11 AM	57412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 35 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-009

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2200	60		mg/Kg	20	1/8/2021 8:13:36 AM	57412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 39 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-010

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4100	150		mg/Kg	50	1/9/2021 5:44:29 PM	57412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 40 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-011

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	5000	300		mg/Kg	100	1/9/2021 5:56:54 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 41 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-012

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3300	150		mg/Kg	50	1/9/2021 6:09:19 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 42 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-013

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4000	150		mg/Kg	50	1/9/2021 6:21:43 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 43 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-014

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4700	150		mg/Kg	50	1/14/2021 2:17:25 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 44 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-015

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	5700	300		mg/Kg	100	1/9/2021 6:46:32 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 45 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-016

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	8300	300		mg/Kg	100	1/9/2021 6:58:57 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 46 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-017

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2900	150		mg/Kg	50	1/9/2021 7:11:21 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 49 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-018

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4900	300		mg/Kg	100	1/9/2021 7:48:35 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 50 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-019

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	6700	300		mg/Kg	100	1/9/2021 8:01:00 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 51 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-020

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3800	150		mg/Kg	50	1/9/2021 8:13:24 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 52 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-021

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3000	150		mg/Kg	50	1/9/2021 8:25:49 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 53 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-022

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	5900	300		mg/Kg	100	1/9/2021 8:38:14 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 60 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-023

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2900	150		mg/Kg	50	1/9/2021 8:50:39 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 61 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-024

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4200	150		mg/Kg	50	1/9/2021 9:03:04 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 63 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-025

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3100	150		mg/Kg	50	1/9/2021 9:15:28 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 64 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-026

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4500	300		mg/Kg	100	1/9/2021 9:27:52 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 69 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-027

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2600	150		mg/Kg	50	1/9/2021 9:40:16 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 70 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-028

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3000	150		mg/Kg	50	1/9/2021 10:17:29 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 74 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-029

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2500	150		mg/Kg	50	1/9/2021 10:29:53 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 76 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-030

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3100	150		mg/Kg	50	1/9/2021 10:42:18 PM	57421

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 77 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-031

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	5000	150		mg/Kg	50	1/9/2021 10:54:42 PM	57426

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 78 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-032

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4200	300		mg/Kg	100	1/9/2021 11:07:07 PM	57426

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 81 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-033

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	5400	300		mg/Kg	100	1/9/2021 11:19:31 PM	57426

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 83 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-034

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2400	150		mg/Kg	50	1/9/2021 11:31:56 PM	57426

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 85 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-035

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3800	150		mg/Kg	50	1/9/2021 11:44:21 PM	57426

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 86 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-036

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3700	150		mg/Kg	50	1/9/2021 11:56:46 PM	57426

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 87 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-037

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3200	150		mg/Kg	50	1/10/2021 12:09:10 AM	57426

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 130 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-038

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	230	60		mg/Kg	20	1/8/2021 5:21:05 PM	57426

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 127 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-039

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1800	60		mg/Kg	20	1/8/2021 5:33:29 PM	57426

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 126 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-040

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2300	60		mg/Kg	20	1/8/2021 5:45:53 PM	57426

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 125 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-041

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3700	150		mg/Kg	50	1/10/2021 12:46:24 AM	57426

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 124 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-042

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4900	150		mg/Kg	50	1/14/2021 2:29:50 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 123 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-043

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4200	150		mg/Kg	50	1/14/2021 2:42:14 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 122 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-044

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2800	150		mg/Kg	50	1/14/2021 11:57:43 AM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 121 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-045

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3600	150		mg/Kg	50	1/14/2021 12:10:07 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 120 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-046

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1000	150		mg/Kg	50	1/14/2021 4:21:30 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 119 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-047

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3200	150		mg/Kg	50	1/15/2021 9:35:34 AM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 117 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-048

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3900	150		mg/Kg	50	1/15/2021 9:47:58 AM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 116 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-049

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4700	150		mg/Kg	50	1/14/2021 2:54:39 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 115 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-050

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4600	150		mg/Kg	50	1/14/2021 3:07:03 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 114 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-051

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3600	150		mg/Kg	50	1/14/2021 12:34:56 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 113 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-052

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4900	300		mg/Kg	100	1/14/2021 3:19:28 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 112 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-053

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4300	150		mg/Kg	50	1/14/2021 3:56:41 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 111 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-054

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1200	60		mg/Kg	20	1/9/2021 4:06:19 AM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 110 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-055

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1100	61		mg/Kg	20	1/9/2021 4:18:43 AM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 109 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-056

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2600	150		mg/Kg	50	1/14/2021 12:47:20 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 108 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-057

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	6200	300		mg/Kg	100	1/14/2021 4:09:06 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 107 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-058

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3000	150		mg/Kg	50	1/14/2021 12:59:44 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 106 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-059

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2700	150		mg/Kg	50	1/14/2021 1:12:08 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 105 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-060

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2200	150		mg/Kg	50	1/14/2021 1:24:33 PM	57433

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: EW 26

Project: CWMS Release

Collection Date: 1/4/2021

Lab ID: 2101235-061

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	71	60		mg/Kg	20	1/9/2021 6:22:50 AM	57433
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3	H	mg/Kg	1	1/21/2021 11:18:16 AM	57643
Motor Oil Range Organics (MRO)	ND	46	H	mg/Kg	1	1/21/2021 11:18:16 AM	57643
Surr: DNOP	70.8	30.4-154	H	%Rec	1	1/21/2021 11:18:16 AM	57643
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	H	mg/Kg	1	1/21/2021 2:30:50 PM	57636
Surr: BFB	105	75.3-105	SH	%Rec	1	1/21/2021 2:30:50 PM	57636
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024	H	mg/Kg	1	1/21/2021 2:30:50 PM	57636
Toluene	ND	0.048	H	mg/Kg	1	1/21/2021 2:30:50 PM	57636
Ethylbenzene	ND	0.048	H	mg/Kg	1	1/21/2021 2:30:50 PM	57636
Xylenes, Total	ND	0.096	H	mg/Kg	1	1/21/2021 2:30:50 PM	57636
Surr: 4-Bromofluorobenzene	108	80-120	H	%Rec	1	1/21/2021 2:30:50 PM	57636

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 11

Project: CWMS Release

Collection Date: 1/4/2021

Lab ID: 2101235-062

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	1/10/2021 12:08:50 PM	57441
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.1	H	mg/Kg	1	1/21/2021 11:41:57 AM	57643
Motor Oil Range Organics (MRO)	ND	45	H	mg/Kg	1	1/21/2021 11:41:57 AM	57643
Surr: DNOP	92.4	30.4-154	H	%Rec	1	1/21/2021 11:41:57 AM	57643
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	H	mg/Kg	1	1/21/2021 2:54:51 PM	57636
Surr: BFB	112	75.3-105	SH	%Rec	1	1/21/2021 2:54:51 PM	57636
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023	H	mg/Kg	1	1/21/2021 2:54:51 PM	57636
Toluene	ND	0.047	H	mg/Kg	1	1/21/2021 2:54:51 PM	57636
Ethylbenzene	ND	0.047	H	mg/Kg	1	1/21/2021 2:54:51 PM	57636
Xylenes, Total	ND	0.093	H	mg/Kg	1	1/21/2021 2:54:51 PM	57636
Surr: 4-Bromofluorobenzene	110	80-120	H	%Rec	1	1/21/2021 2:54:51 PM	57636

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 12

Project: CWMS Release

Collection Date: 1/4/2021

Lab ID: 2101235-063

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	1/10/2021 12:46:03 PM	57441
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4	H	mg/Kg	1	1/21/2021 12:05:39 PM	57643
Motor Oil Range Organics (MRO)	ND	47	H	mg/Kg	1	1/21/2021 12:05:39 PM	57643
Surr: DNOP	109	30.4-154	H	%Rec	1	1/21/2021 12:05:39 PM	57643
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	H	mg/Kg	1	1/21/2021 4:30:44 PM	57636
Surr: BFB	109	75.3-105	SH	%Rec	1	1/21/2021 4:30:44 PM	57636
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023	H	mg/Kg	1	1/21/2021 4:30:44 PM	57636
Toluene	ND	0.047	H	mg/Kg	1	1/21/2021 4:30:44 PM	57636
Ethylbenzene	ND	0.047	H	mg/Kg	1	1/21/2021 4:30:44 PM	57636
Xylenes, Total	ND	0.093	H	mg/Kg	1	1/21/2021 4:30:44 PM	57636
Surr: 4-Bromofluorobenzene	109	80-120	H	%Rec	1	1/21/2021 4:30:44 PM	57636

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 13

Project: CWMS Release

Collection Date: 1/4/2021

Lab ID: 2101235-064

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	68	61		mg/Kg	20	1/10/2021 1:48:05 PM	57441
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.0	H	mg/Kg	1	1/21/2021 12:29:18 PM	57643
Motor Oil Range Organics (MRO)	ND	45	H	mg/Kg	1	1/21/2021 12:29:18 PM	57643
Surr: DNOP	76.1	30.4-154	H	%Rec	1	1/21/2021 12:29:18 PM	57643
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	1/21/2021 4:54:43 PM	57636
Surr: BFB	105	75.3-105	H	%Rec	1	1/21/2021 4:54:43 PM	57636
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024	H	mg/Kg	1	1/21/2021 4:54:43 PM	57636
Toluene	ND	0.049	H	mg/Kg	1	1/21/2021 4:54:43 PM	57636
Ethylbenzene	ND	0.049	H	mg/Kg	1	1/21/2021 4:54:43 PM	57636
Xylenes, Total	ND	0.098	H	mg/Kg	1	1/21/2021 4:54:43 PM	57636
Surr: 4-Bromofluorobenzene	108	80-120	H	%Rec	1	1/21/2021 4:54:43 PM	57636

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 14

Project: CWMS Release

Collection Date: 1/4/2021

Lab ID: 2101235-065

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	65	60		mg/Kg	20	1/10/2021 2:00:29 PM	57441
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6	H	mg/Kg	1	1/21/2021 12:53:03 PM	57643
Motor Oil Range Organics (MRO)	ND	48	H	mg/Kg	1	1/21/2021 12:53:03 PM	57643
Surr: DNOP	66.7	30.4-154	H	%Rec	1	1/21/2021 12:53:03 PM	57643
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	H	mg/Kg	1	1/21/2021 5:18:40 PM	57636
Surr: BFB	107	75.3-105	SH	%Rec	1	1/21/2021 5:18:40 PM	57636
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025	H	mg/Kg	1	1/21/2021 5:18:40 PM	57636
Toluene	ND	0.050	H	mg/Kg	1	1/21/2021 5:18:40 PM	57636
Ethylbenzene	ND	0.050	H	mg/Kg	1	1/21/2021 5:18:40 PM	57636
Xylenes, Total	ND	0.10	H	mg/Kg	1	1/21/2021 5:18:40 PM	57636
Surr: 4-Bromofluorobenzene	109	80-120	H	%Rec	1	1/21/2021 5:18:40 PM	57636

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 11

Project: CWMS Release

Collection Date: 1/4/2021

Lab ID: 2101235-066

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	1/10/2021 2:12:53 PM	57441
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3	H	mg/Kg	1	1/21/2021 1:16:50 PM	57643
Motor Oil Range Organics (MRO)	ND	47	H	mg/Kg	1	1/21/2021 1:16:50 PM	57643
Surr: DNOP	78.4	30.4-154	H	%Rec	1	1/21/2021 1:16:50 PM	57643
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	1/21/2021 5:42:30 PM	57636
Surr: BFB	106	75.3-105	SH	%Rec	1	1/21/2021 5:42:30 PM	57636
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025	H	mg/Kg	1	1/21/2021 5:42:30 PM	57636
Toluene	ND	0.049	H	mg/Kg	1	1/21/2021 5:42:30 PM	57636
Ethylbenzene	ND	0.049	H	mg/Kg	1	1/21/2021 5:42:30 PM	57636
Xylenes, Total	ND	0.098	H	mg/Kg	1	1/21/2021 5:42:30 PM	57636
Surr: 4-Bromofluorobenzene	109	80-120	H	%Rec	1	1/21/2021 5:42:30 PM	57636

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 13

Project: CWMS Release

Collection Date: 1/4/2021

Lab ID: 2101235-067

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	1/10/2021 2:25:17 PM	57441
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5	H	mg/Kg	1	1/21/2021 1:40:40 PM	57643
Motor Oil Range Organics (MRO)	ND	47	H	mg/Kg	1	1/21/2021 1:40:40 PM	57643
Surr: DNOP	77.3	30.4-154	H	%Rec	1	1/21/2021 1:40:40 PM	57643
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	H	mg/Kg	1	1/21/2021 6:06:23 PM	57636
Surr: BFB	104	75.3-105	H	%Rec	1	1/21/2021 6:06:23 PM	57636
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024	H	mg/Kg	1	1/21/2021 6:06:23 PM	57636
Toluene	ND	0.048	H	mg/Kg	1	1/21/2021 6:06:23 PM	57636
Ethylbenzene	ND	0.048	H	mg/Kg	1	1/21/2021 6:06:23 PM	57636
Xylenes, Total	ND	0.097	H	mg/Kg	1	1/21/2021 6:06:23 PM	57636
Surr: 4-Bromofluorobenzene	107	80-120	H	%Rec	1	1/21/2021 6:06:23 PM	57636

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 157 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-068

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1300	60		mg/Kg	20	1/10/2021 2:37:43 PM	57441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 158 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-069

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	180	60		mg/Kg	20	1/10/2021 2:50:07 PM	57441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 159 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-070

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2300	60		mg/Kg	20	1/10/2021 3:02:32 PM	57441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 160 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-071

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2700	150		mg/Kg	50	1/11/2021 9:58:10 AM	57441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 161 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-072

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2700	150		mg/Kg	50	1/11/2021 10:10:35 AM	57441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 162 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-073

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	210	60		mg/Kg	20	1/10/2021 3:39:45 PM	57441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 163 @ 3'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-074

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	1/10/2021 4:16:59 PM	57441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 164 @ 3'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-075

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	690	60		mg/Kg	20	1/10/2021 4:29:23 PM	57441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 165 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-076

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	1/10/2021 4:41:47 PM	57441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 166 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-077

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	130	60		mg/Kg	20	1/10/2021 4:54:12 PM	57441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 167 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-078

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	120	60		mg/Kg	20	1/10/2021 5:06:37 PM	57441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 168 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-079

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	120	60		mg/Kg	20	1/10/2021 5:19:02 PM	57441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 169 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-080

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	91	61		mg/Kg	20	1/11/2021 10:47:48 AM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 170 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-081

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	85	60		mg/Kg	20	1/11/2021 11:25:01 AM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 171 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-082

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	220	60		mg/Kg	20	1/11/2021 12:27:03 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 172 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-083

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	810	60		mg/Kg	20	1/11/2021 12:39:28 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 173 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-084

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3700	150		mg/Kg	50	1/12/2021 10:28:46 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 174 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-085

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	200	60		mg/Kg	20	1/11/2021 1:04:18 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 175 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-086

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	610	60		mg/Kg	20	1/11/2021 1:16:42 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 176 @ 3'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-087

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1700	60		mg/Kg	20	1/11/2021 1:29:07 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 177 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-088

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2600	150		mg/Kg	50	1/12/2021 10:41:11 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 178 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-089

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1300	60		mg/Kg	20	1/11/2021 1:53:56 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 179 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-090

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	900	60		mg/Kg	20	1/11/2021 2:06:21 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 180 @ 3'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-091

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	150	60		mg/Kg	20	1/11/2021 2:18:45 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 181 @ 3'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-092

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	93	59		mg/Kg	20	1/11/2021 2:56:00 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 182 @ 3'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-093

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	83	60		mg/Kg	20	1/11/2021 3:08:24 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 183 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-094

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1100	60		mg/Kg	20	1/11/2021 3:20:49 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 184 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-095

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	280	60		mg/Kg	20	1/11/2021 3:33:13 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 185 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-096

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1200	61		mg/Kg	20	1/11/2021 3:45:37 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 186 @ 3'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-097

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	210	61		mg/Kg	20	1/11/2021 3:58:02 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 187 @ 3'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-098

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	71	61		mg/Kg	20	1/11/2021 4:10:26 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 188 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-099

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3200	150		mg/Kg	50	1/12/2021 10:53:36 PM	57451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 189 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-100

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3900	150		mg/Kg	50	1/12/2021 11:06:00 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 190 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-101

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2400	150		mg/Kg	50	1/12/2021 11:18:25 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 191 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-102

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	130	60		mg/Kg	20	1/11/2021 6:39:22 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 192 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-103

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	9100	600		mg/Kg	200	1/12/2021 11:30:49 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 193 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-104

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4400	150		mg/Kg	50	1/12/2021 11:43:14 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 194 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-105

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3300	150		mg/Kg	50	1/13/2021 12:20:28 AM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 195 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-106

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	5200	150		mg/Kg	50	1/13/2021 12:32:53 AM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 196 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-107

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	420	60		mg/Kg	20	1/11/2021 8:06:13 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 197 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-108

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2300	150		mg/Kg	50	1/13/2021 12:45:17 AM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 198 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-109

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3700	150		mg/Kg	50	1/13/2021 12:57:41 AM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 199 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-110

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	630	60		mg/Kg	20	1/11/2021 8:43:27 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 200 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-111

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2300	150		mg/Kg	50	1/13/2021 1:10:06 AM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 201 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-112

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	930	59		mg/Kg	20	1/11/2021 9:08:17 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 202 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-113

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1500	61		mg/Kg	20	1/11/2021 9:20:41 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 203 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-114

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2200	60		mg/Kg	20	1/11/2021 9:33:05 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 204 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-115

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	310	60		mg/Kg	20	1/11/2021 9:45:29 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 205 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-116

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1200	60		mg/Kg	20	1/11/2021 10:22:42 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 206 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-117

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	150	61		mg/Kg	20	1/11/2021 10:35:06 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 207 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-118

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	300	60		mg/Kg	20	1/11/2021 10:47:31 PM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 68 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-119

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2200	150		mg/Kg	50	1/13/2021 1:22:31 AM	57453

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 89 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-120

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2400	150		mg/Kg	50	1/13/2021 1:34:55 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 104

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-121

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3800	150		mg/Kg	50	1/13/2021 1:47:20 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 103

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-122

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	5800	300		mg/Kg	100	1/14/2021 1:27:47 PM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 102

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-123

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	7500	300		mg/Kg	100	1/13/2021 2:12:09 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 101

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-124

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	5600	300		mg/Kg	100	1/13/2021 2:49:22 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 100

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-125

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3500	150		mg/Kg	50	1/13/2021 3:01:46 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 99

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-126

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	10000	600		mg/Kg	200	1/13/2021 3:14:11 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 98

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-127

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	5900	300		mg/Kg	100	1/13/2021 3:26:36 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 97

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-128

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	9000	300		mg/Kg	100	1/14/2021 1:40:11 PM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 96

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-129

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4300	150		mg/Kg	50	1/13/2021 3:51:26 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 95

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-130

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3300	150		mg/Kg	50	1/14/2021 1:52:36 PM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 94

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-131

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2100	150		mg/Kg	50	1/13/2021 4:16:16 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 93

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-132

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	5200	300		mg/Kg	100	1/13/2021 4:28:40 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 92 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-133

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	1/12/2021 3:57:47 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 91 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-134

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4900	300		mg/Kg	100	1/13/2021 4:41:05 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 90 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-135

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	72	60		mg/Kg	20	1/12/2021 4:22:37 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 132 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-136

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4300	150		mg/Kg	50	1/13/2021 5:18:19 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 133 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-137

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	6200	300		mg/Kg	100	1/13/2021 5:30:43 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 134 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-138

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	380	60		mg/Kg	20	1/12/2021 4:59:50 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical ReportLab Order **2101235**Date Reported: **1/27/2021****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Mewbourne Oil Company**Client Sample ID:** FL 135 @ 4'**Project:** CWMS Release**Collection Date:** 1/6/2021**Lab ID:** 2101235-139**Matrix:** SOIL**Received Date:** 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3200	150		mg/Kg	50	1/13/2021 5:43:08 AM	57466

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 136 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-140

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	7100	300		mg/Kg	100	1/13/2021 4:47:06 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 137 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-141

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1300	60		mg/Kg	20	1/12/2021 7:23:06 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 138 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-142

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2300	150		mg/Kg	50	1/14/2021 1:36:58 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 139 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-143

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1300	60		mg/Kg	20	1/12/2021 7:47:55 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 140 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-144

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1600	60		mg/Kg	20	1/12/2021 8:00:19 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 141 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-145

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4200	150		mg/Kg	50	1/13/2021 5:36:45 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 142 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-146

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	6300	300		mg/Kg	100	1/13/2021 5:49:09 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 143 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-147

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4100	150		mg/Kg	50	1/13/2021 6:01:34 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 144 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-148

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4000	150		mg/Kg	50	1/13/2021 6:13:59 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 145 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-149

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	5900	300		mg/Kg	100	1/13/2021 6:26:23 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 146 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-150

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	6700	300		mg/Kg	100	1/13/2021 6:38:48 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 147 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-151

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	8300	300		mg/Kg	100	1/13/2021 6:51:13 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 148 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-152

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2200	150		mg/Kg	50	1/13/2021 7:03:37 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 149 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-153

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1400	60		mg/Kg	20	1/12/2021 10:16:48 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 150 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-154

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2400	61		mg/Kg	20	1/12/2021 10:29:12 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 151 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-155

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	370	60		mg/Kg	20	1/12/2021 10:41:37 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 152 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-156

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2400	150		mg/Kg	50	1/13/2021 7:16:02 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 153 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-157

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2300	60		mg/Kg	20	1/12/2021 11:31:17 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101235

Date Reported: 1/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 154 @ 4'

Project: CWMS Release

Collection Date: 1/6/2021

Lab ID: 2101235-158

Matrix: SOIL

Received Date: 1/7/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	5600	300		mg/Kg	100	1/13/2021 7:28:27 PM	57470

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101235

27-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57412	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57412	RunNo: 74472								
Prep Date: 1/7/2021	Analysis Date: 1/8/2021	SeqNo: 2629134	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57412	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57412	RunNo: 74472								
Prep Date: 1/7/2021	Analysis Date: 1/8/2021	SeqNo: 2629135	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.7	90	110			

Sample ID: MB-57441	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57441	RunNo: 74509								
Prep Date: 1/10/2021	Analysis Date: 1/10/2021	SeqNo: 2630317	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57441	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57441	RunNo: 74509								
Prep Date: 1/10/2021	Analysis Date: 1/10/2021	SeqNo: 2630318	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

Sample ID: MB-57426	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57426	RunNo: 74500								
Prep Date: 1/8/2021	Analysis Date: 1/8/2021	SeqNo: 2630787	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57426	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57426	RunNo: 74500								
Prep Date: 1/8/2021	Analysis Date: 1/8/2021	SeqNo: 2630788	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.6	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101235

27-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57421	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57421	RunNo: 74500								
Prep Date: 1/8/2021	Analysis Date: 1/8/2021	SeqNo: 2630817 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57421	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57421	RunNo: 74500								
Prep Date: 1/8/2021	Analysis Date: 1/8/2021	SeqNo: 2630818 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	90	110			

Sample ID: MB-57433	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57433	RunNo: 74500								
Prep Date: 1/8/2021	Analysis Date: 1/9/2021	SeqNo: 2630849 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57433	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57433	RunNo: 74500								
Prep Date: 1/8/2021	Analysis Date: 1/9/2021	SeqNo: 2630850 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.5	90	110			

Sample ID: MB-57451	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57451	RunNo: 74537								
Prep Date: 1/11/2021	Analysis Date: 1/11/2021	SeqNo: 2631337 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57451	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57451	RunNo: 74537								
Prep Date: 1/11/2021	Analysis Date: 1/11/2021	SeqNo: 2631338 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.7	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101235

27-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57453	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57453	RunNo: 74537								
Prep Date: 1/11/2021	Analysis Date: 1/11/2021	SeqNo: 2631367	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57453	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57453	RunNo: 74537								
Prep Date: 1/11/2021	Analysis Date: 1/11/2021	SeqNo: 2631368	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.8	90	110			

Sample ID: MB-57466	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57466	RunNo: 74537								
Prep Date: 1/11/2021	Analysis Date: 1/11/2021	SeqNo: 2631399	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57466	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57466	RunNo: 74537								
Prep Date: 1/11/2021	Analysis Date: 1/11/2021	SeqNo: 2631400	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.1	90	110			

Sample ID: MB-57470	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57470	RunNo: 74555								
Prep Date: 1/11/2021	Analysis Date: 1/12/2021	SeqNo: 2632762	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57470	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57470	RunNo: 74555								
Prep Date: 1/11/2021	Analysis Date: 1/12/2021	SeqNo: 2632763	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101235

27-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57643	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 57643	RunNo: 74757								
Prep Date: 1/20/2021	Analysis Date: 1/21/2021	SeqNo: 2638248	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		106	30.4	154			

Sample ID: LCS-57643	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 57643	RunNo: 74757								
Prep Date: 1/20/2021	Analysis Date: 1/21/2021	SeqNo: 2638897	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	10	50.00	0	114	68.9	141			
Surr: DNOP	5.8		5.000		117	30.4	154			

Sample ID: 2101235-061AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: EW 26	Batch ID: 57643	RunNo: 74757								
Prep Date: 1/20/2021	Analysis Date: 1/21/2021	SeqNo: 2638899	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	33	9.5	47.57	0	70.1	15	184			H
Surr: DNOP	2.7		4.757		56.4	30.4	154			H

Sample ID: 2101235-061AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: EW 26	Batch ID: 57643	RunNo: 74757								
Prep Date: 1/20/2021	Analysis Date: 1/21/2021	SeqNo: 2638900	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	31	9.4	46.77	0	67.2	15	184	5.87	23.9	H
Surr: DNOP	2.6		4.677		56.1	30.4	154	0	0	H

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101235

27-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-57636	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 57636	RunNo: 74760								
Prep Date: 1/20/2021	Analysis Date: 1/21/2021	SeqNo: 2638510	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	75.3	105			

Sample ID: lcs-57636	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 57636	RunNo: 74760								
Prep Date: 1/20/2021	Analysis Date: 1/21/2021	SeqNo: 2638511	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.0	80	120			
Surr: BFB	1100		1000		112	75.3	105			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101235

27-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

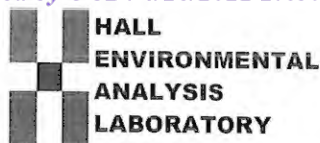
Sample ID: mb-57636	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 57636	RunNo: 74760								
Prep Date: 1/20/2021	Analysis Date: 1/21/2021	SeqNo: 2638527	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID: LCS-57636	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 57636	RunNo: 74760								
Prep Date: 1/20/2021	Analysis Date: 1/21/2021	SeqNo: 2638528	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.0	80	120			
Toluene	0.99	0.050	1.000	0	99.2	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.1	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2101235

RcptNo: 1

Received By: Sean Livingston 1/7/2021 8:00:00 AM

Completed By: Erin Melendrez 1/7/2021 8:54:13 AM

Reviewed By: SGC 1/7/21 IO 1/7/21

S. Livingston

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: JR 1/7/21

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good				
2	2.1	Good				
3	0.7	Good				

Chain-of-Custody Record

Client: NEWBOURNE

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Project #:

Project Manager:

Sampler:

On Ice: ☒ Yes ☐ No

of Coolers: 3

Cooler Temp (including CF): See remarks (°C)Container
Type and #Preservative
Type

HEAL No.
7101235

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

Date:	Time:	Relinquished by:
-------	-------	------------------

11/6/21	1800	Leonel Mojica
Date:	Time:	Relinquished by:

Received by: Via:

Via: _____ Date _____ Time _____

Received by: Via:

Via: _____ Date: 1/6/21 Time: 1:00

Remarks:

Remarks: Please Email Results to pm@etechnv.com
Please hold for TPH & BTEX
 $1.6 \pm 0 = 1.6^\circ$ $2.1 \pm 0 = 2.1^\circ$ $0.7 \pm 0 = 0.7^\circ$

Chain-of-Custody Record

Client: MEWBORNE

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

CWMS RELEASE

Project #:

13296

Project Manager:

Lance CrenshawSampler: Heard MojicaOn Ice: ☒ Yes ☐ No# of Coolers: 3Cooler Temp (including CF): See remarks (°C)

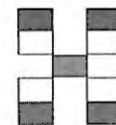
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
1/6/21		Soil	FL 162 @ 4'	1		-073
1/6/21		Soil	FL 163 @ 3'	1		-074
1/6/21		Soil	FL 164 @ 3'	1		-075
1/6/21		Soil	FL 165 @ 4'	1		-076
1/6/21		Soil	FL 166 @ 4'	1		-077
1/6/21		Soil	FL 167 @ 4'	1		-078
1/6/21		Soil	FL 168 @ 4'	1		-079
1/6/21		Soil	FL 169 @ 4'	1		-080
1/6/21		Soil	FL 170 @ 4'	1		-081
1/6/21		Soil	FL 171 @ 4'	1		-082
1/6/21		Soil	FL 172 @ 4'	1		-083
1/6/21		Soil	FL 173 @ 4'	1		-084

Date: 1/6/21 Time: 1600 Relinquished by: Heard Mojica

Date: 1/6/21 Time: 1900 Relinquished by: [Signature]

Received by: [Signature] Via: _____ Date: 1/6/21 Time: 1600

Received by: SGL Via: Courier Date: 1/7/21 Time: 8:00



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	CNF, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)										
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													

Remarks: Please email results to pm@etechnical.com

Please hold for TPH & BTEX

1.6±0=1.6°C 2.1±0=2.1°C 0.7±0=0.7°C

Released to Imaging: 8/23/2021 11:37:48 AM

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Project #:

Phone #:

Project Manager:

email or Fax#:

QA/QC Package:

~~Shane~~ Chance Crossman

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

Sampler: Wendy Hirsch

☐ NELAC ☐ Other

On Ice: ☒ Yes ☐ No


☐ EDD (Type)


of Coolers: 3

Cooler Temp (including CF): *See remarks* (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / TPH	TPH:801	8081 Pe	EDB (Me	PAHs by	RCRA 8	C ₁ , F, B	8260 (V	8270 (Se	Total Co
1/6/21		Soil	FL 186 @ 3'	1	Ice	-097	x x						x			
1/6/21		Soil	FL 187 @ 3'	1	Ice	-098	x x						x			
1/6/21		Soil	FL 188 @ 4'	1	Ice	-099	x x						x			
1/6/21		Soil	FL 189 @ 4'	1	Ice	-100	x x						x			
1/6/21		Soil	FL 190 @ 4'	1	Ice	-101	x x						x			
1/6/21		Soil	FL 191 @ 4'	1	Ice	-102	x x						x			
1/6/21		Soil	FL 192 @ 4'	1	Ice	-103	x x						x			
1/6/21		Soil	FL 193 @ 4'	1	Ice	-104	x x						x			
1/6/21		Soil	FL 194 @ 4'	1	Ice	-105	x x						x			
1/6/21		Soil	FL 195 @ 4'	1	Ice	-106	x x						x			
1/6/21		Soil	FL 196 @ 4'	1	Ice	-107	x x						x			
1/6/21		Soil	FL 197 @ 4'	1	Ice	-108	x x						x			

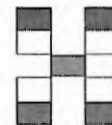
Date:	Time:	Relinquished by:
1/6/21	1600	Heonel Mojica
Date:	Time:	Relinquished by:

Received by:	Via:	Date	Time
		1/6/21	1600

Date:	Time:	Relinquished by:
1/6/21	1900	

Received by:	Via:	Date	Time
SGL	Courier	1/7/21	8:00

Remarks:
Please email results to pm@ctechenv.com
Please hold for TPH & BTEX
 $1.6 \pm 0 = 1.6^{\circ}\text{C}$ $2.1 \pm 0 = 2.1^{\circ}\text{C}$ $0.7 \pm 0 = 0.7^{\circ}\text{C}$



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Received by OCD: 4/28/2021 2:43:51 PM

Page 425 of 559

Chain-of-Custody Record

Client:

NEWBOURNE

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard

☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

CWMS RELEASE

Project #:

13296

Project Manager:

Lance Crossman

Sampler: Leon Morris

On Ice: ☒ Yes ☐ No

of Coolers: 3

Cooler Temp (including CF): See remarks (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAT No.
						2101735

1/6/21		FL 92 @ 4'	1	Top	-133
--------	--	------------	---	-----	------

11/6/21		FL 91 @ 4'	1	Fe ₂	-134
---------	--	------------	---	-----------------	------

1/6/21		FL 910 @ 4'	1	T_{ϕ}	-135
--------	--	-------------	---	------------	------

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
-------	-------	------------------	--------------	------	------	------

1/6/21	Koo heard	Moira	St	1/6/21
--------	-----------	-------	----	--------

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
-------	-------	------------------	--------------	------	------	------

1/6/21 1900 SGC courier 1/7/21 8:00

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

Remarks:
Please Email Results to pm@etechenv.com

Please hold for TPX & BTEX

Released to Imaging: 8/23/2021 11:37:48 AM

Turn-Around Time: 5 Day	
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush
Project Name: CWMS Release	
Project #: 132916	
Project Manager: Lance Crenshaw	
Sampler:	
On Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
# of Coolers: 3	
Cooler Temp (including CF): See remarks (°C)	

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

Remarks:

$1.6 \pm 0 = 1.6^{\circ}\text{C}$
 $2.1 \pm 0 = 2.1^{\circ}\text{C}$
 $0.7 \pm 0 = 0.7^{\circ}\text{C}$

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

January 19, 2021

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX:

RE: CWMS Release

OrderNo.: 2101331

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 21 sample(s) on 1/9/2021 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued January 15, 2021.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 102 @5'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-001

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2200	150		mg/Kg	50	1/13/2021 8:05:41 PM	57497

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 28

Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 98 @5'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-002

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	320	60		mg/Kg	20	1/12/2021 8:49:28 PM	57497

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 2 of 28

Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 99 @5'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-003

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1700	61		mg/Kg	20	1/12/2021 9:51:31 PM	57497

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 192 @5'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-004

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2900	150		mg/Kg	50	1/13/2021 8:18:05 PM	57509

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 208 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-005

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2021 4:05:55 AM	57437
Surr: BFB	104	70-130		%Rec	1	1/11/2021 4:05:55 AM	57437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/12/2021 2:12:21 PM	57444
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/12/2021 2:12:21 PM	57444
Surr: DNOP	79.7	30.4-154		%Rec	1	1/12/2021 2:12:21 PM	57444
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	1/11/2021 4:05:55 AM	57437
Toluene	ND	0.050		mg/Kg	1	1/11/2021 4:05:55 AM	57437
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2021 4:05:55 AM	57437
Xylenes, Total	ND	0.10		mg/Kg	1	1/11/2021 4:05:55 AM	57437
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	1/11/2021 4:05:55 AM	57437
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	1/11/2021 4:05:55 AM	57437
Surr: Dibromofluoromethane	108	70-130		%Rec	1	1/11/2021 4:05:55 AM	57437
Surr: Toluene-d8	98.8	70-130		%Rec	1	1/11/2021 4:05:55 AM	57437

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 209 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-006

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2021 6:28:17 AM	57437
Surr: BFB	106	70-130		%Rec	1	1/11/2021 6:28:17 AM	57437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/12/2021 2:36:03 PM	57444
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/12/2021 2:36:03 PM	57444
Surr: DNOP	95.8	30.4-154		%Rec	1	1/12/2021 2:36:03 PM	57444
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	1/11/2021 6:28:17 AM	57437
Toluene	ND	0.050		mg/Kg	1	1/11/2021 6:28:17 AM	57437
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2021 6:28:17 AM	57437
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2021 6:28:17 AM	57437
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%Rec	1	1/11/2021 6:28:17 AM	57437
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	1/11/2021 6:28:17 AM	57437
Surr: Dibromofluoromethane	108	70-130		%Rec	1	1/11/2021 6:28:17 AM	57437
Surr: Toluene-d8	98.7	70-130		%Rec	1	1/11/2021 6:28:17 AM	57437

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 6 of 28

Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 210 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-007

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2021 6:56:53 AM	57437
Surr: BFB	108	70-130		%Rec	1	1/11/2021 6:56:53 AM	57437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/12/2021 2:59:47 PM	57444
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/12/2021 2:59:47 PM	57444
Surr: DNOP	95.4	30.4-154		%Rec	1	1/12/2021 2:59:47 PM	57444
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	1/11/2021 6:56:53 AM	57437
Toluene	ND	0.050		mg/Kg	1	1/11/2021 6:56:53 AM	57437
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2021 6:56:53 AM	57437
Xylenes, Total	ND	0.10		mg/Kg	1	1/11/2021 6:56:53 AM	57437
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	1/11/2021 6:56:53 AM	57437
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	1/11/2021 6:56:53 AM	57437
Surr: Dibromofluoromethane	109	70-130		%Rec	1	1/11/2021 6:56:53 AM	57437
Surr: Toluene-d8	99.0	70-130		%Rec	1	1/11/2021 6:56:53 AM	57437

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 7 of 28

Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 211 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-008

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2021 7:25:34 AM	57437
Surr: BFB	103	70-130		%Rec	1	1/11/2021 7:25:34 AM	57437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	1/12/2021 3:23:30 PM	57444
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/12/2021 3:23:30 PM	57444
Surr: DNOP	103	30.4-154		%Rec	1	1/12/2021 3:23:30 PM	57444
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	1/11/2021 7:25:34 AM	57437
Toluene	ND	0.049		mg/Kg	1	1/11/2021 7:25:34 AM	57437
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2021 7:25:34 AM	57437
Xylenes, Total	ND	0.097		mg/Kg	1	1/11/2021 7:25:34 AM	57437
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	1/11/2021 7:25:34 AM	57437
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	1/11/2021 7:25:34 AM	57437
Surr: Dibromofluoromethane	111	70-130		%Rec	1	1/11/2021 7:25:34 AM	57437
Surr: Toluene-d8	98.9	70-130		%Rec	1	1/11/2021 7:25:34 AM	57437

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 212 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-009

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2021 7:54:10 AM	57437
Surr: BFB	104	70-130		%Rec	1	1/11/2021 7:54:10 AM	57437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/12/2021 3:47:12 PM	57444
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/12/2021 3:47:12 PM	57444
Surr: DNOP	86.0	30.4-154		%Rec	1	1/12/2021 3:47:12 PM	57444
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	1/11/2021 7:54:10 AM	57437
Toluene	ND	0.049		mg/Kg	1	1/11/2021 7:54:10 AM	57437
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2021 7:54:10 AM	57437
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2021 7:54:10 AM	57437
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	1/11/2021 7:54:10 AM	57437
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	1/11/2021 7:54:10 AM	57437
Surr: Dibromofluoromethane	110	70-130		%Rec	1	1/11/2021 7:54:10 AM	57437
Surr: Toluene-d8	98.6	70-130		%Rec	1	1/11/2021 7:54:10 AM	57437

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 213 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-010

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2021 8:22:38 AM	57437
Surr: BFB	106	70-130		%Rec	1	1/11/2021 8:22:38 AM	57437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/12/2021 4:10:51 PM	57444
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/12/2021 4:10:51 PM	57444
Surr: DNOP	114	30.4-154		%Rec	1	1/12/2021 4:10:51 PM	57444
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	1/11/2021 8:22:38 AM	57437
Toluene	ND	0.049		mg/Kg	1	1/11/2021 8:22:38 AM	57437
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2021 8:22:38 AM	57437
Xylenes, Total	ND	0.097		mg/Kg	1	1/11/2021 8:22:38 AM	57437
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	1/11/2021 8:22:38 AM	57437
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	1/11/2021 8:22:38 AM	57437
Surr: Dibromofluoromethane	106	70-130		%Rec	1	1/11/2021 8:22:38 AM	57437
Surr: Toluene-d8	99.2	70-130		%Rec	1	1/11/2021 8:22:38 AM	57437

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 214 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-011

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2021 8:51:10 AM	57437
Surr: BFB	106	70-130		%Rec	1	1/11/2021 8:51:10 AM	57437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/12/2021 4:34:28 PM	57444
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/12/2021 4:34:28 PM	57444
Surr: DNOP	96.3	30.4-154		%Rec	1	1/12/2021 4:34:28 PM	57444
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	1/11/2021 8:51:10 AM	57437
Toluene	ND	0.049		mg/Kg	1	1/11/2021 8:51:10 AM	57437
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2021 8:51:10 AM	57437
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2021 8:51:10 AM	57437
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	1/11/2021 8:51:10 AM	57437
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	1/11/2021 8:51:10 AM	57437
Surr: Dibromofluoromethane	111	70-130		%Rec	1	1/11/2021 8:51:10 AM	57437
Surr: Toluene-d8	101	70-130		%Rec	1	1/11/2021 8:51:10 AM	57437

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 215 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-012

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2021 9:19:53 AM	57437
Surr: BFB	106	70-130		%Rec	1	1/11/2021 9:19:53 AM	57437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/12/2021 4:58:06 PM	57444
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/12/2021 4:58:06 PM	57444
Surr: DNOP	82.5	30.4-154		%Rec	1	1/12/2021 4:58:06 PM	57444
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	1/11/2021 9:19:53 AM	57437
Toluene	ND	0.049		mg/Kg	1	1/11/2021 9:19:53 AM	57437
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2021 9:19:53 AM	57437
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2021 9:19:53 AM	57437
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	1/11/2021 9:19:53 AM	57437
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	1/11/2021 9:19:53 AM	57437
Surr: Dibromofluoromethane	109	70-130		%Rec	1	1/11/2021 9:19:53 AM	57437
Surr: Toluene-d8	98.2	70-130		%Rec	1	1/11/2021 9:19:53 AM	57437

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 216 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-013

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2021 9:48:31 AM	57437
Surr: BFB	105	70-130		%Rec	1	1/11/2021 9:48:31 AM	57437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/12/2021 5:21:38 PM	57444
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/12/2021 5:21:38 PM	57444
Surr: DNOP	71.7	30.4-154		%Rec	1	1/12/2021 5:21:38 PM	57444
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	1/11/2021 9:48:31 AM	57437
Toluene	ND	0.049		mg/Kg	1	1/11/2021 9:48:31 AM	57437
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2021 9:48:31 AM	57437
Xylenes, Total	ND	0.097		mg/Kg	1	1/11/2021 9:48:31 AM	57437
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	1/11/2021 9:48:31 AM	57437
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	1/11/2021 9:48:31 AM	57437
Surr: Dibromofluoromethane	110	70-130		%Rec	1	1/11/2021 9:48:31 AM	57437
Surr: Toluene-d8	98.7	70-130		%Rec	1	1/11/2021 9:48:31 AM	57437

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 217 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-014

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/11/2021 8:20:03 AM	57445
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/11/2021 8:20:03 AM	57445
Surr: DNOP	91.4	30.4-154		%Rec	1	1/11/2021 8:20:03 AM	57445
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2021 12:22:54 PM	57438
Surr: BFB	103	75.3-105		%Rec	1	1/11/2021 12:22:54 PM	57438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/11/2021 12:22:54 PM	57438
Toluene	ND	0.050		mg/Kg	1	1/11/2021 12:22:54 PM	57438
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2021 12:22:54 PM	57438
Xylenes, Total	ND	0.10		mg/Kg	1	1/11/2021 12:22:54 PM	57438
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	1/11/2021 12:22:54 PM	57438

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 218 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-015

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/11/2021 9:31:38 AM	57445
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/11/2021 9:31:38 AM	57445
Surr: DNOP	88.0	30.4-154		%Rec	1	1/11/2021 9:31:38 AM	57445
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2021 1:33:34 PM	57438
Surr: BFB	102	75.3-105		%Rec	1	1/11/2021 1:33:34 PM	57438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	1/11/2021 1:33:34 PM	57438
Toluene	ND	0.049		mg/Kg	1	1/11/2021 1:33:34 PM	57438
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2021 1:33:34 PM	57438
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2021 1:33:34 PM	57438
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	1/11/2021 1:33:34 PM	57438

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 219 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-016

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/11/2021 9:55:34 AM	57445
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/11/2021 9:55:34 AM	57445
Surr: DNOP	59.4	30.4-154		%Rec	1	1/11/2021 9:55:34 AM	57445
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2021 2:44:34 PM	57438
Surr: BFB	103	75.3-105		%Rec	1	1/11/2021 2:44:34 PM	57438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/11/2021 2:44:34 PM	57438
Toluene	ND	0.050		mg/Kg	1	1/11/2021 2:44:34 PM	57438
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2021 2:44:34 PM	57438
Xylenes, Total	ND	0.10		mg/Kg	1	1/11/2021 2:44:34 PM	57438
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	1/11/2021 2:44:34 PM	57438

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 220 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-017

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/11/2021 10:19:20 AM	57445
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/11/2021 10:19:20 AM	57445
Surr: DNOP	48.9	30.4-154		%Rec	1	1/11/2021 10:19:20 AM	57445
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2021 3:08:13 PM	57438
Surr: BFB	104	75.3-105		%Rec	1	1/11/2021 3:08:13 PM	57438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	1/11/2021 3:08:13 PM	57438
Toluene	ND	0.049		mg/Kg	1	1/11/2021 3:08:13 PM	57438
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2021 3:08:13 PM	57438
Xylenes, Total	ND	0.097		mg/Kg	1	1/11/2021 3:08:13 PM	57438
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	1/11/2021 3:08:13 PM	57438

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 221 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-018

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/11/2021 10:43:37 AM	57445
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/11/2021 10:43:37 AM	57445
Surr: DNOP	58.4	30.4-154		%Rec	1	1/11/2021 10:43:37 AM	57445
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2021 4:43:19 PM	57438
Surr: BFB	104	75.3-105		%Rec	1	1/11/2021 4:43:19 PM	57438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/11/2021 4:43:19 PM	57438
Toluene	ND	0.049		mg/Kg	1	1/11/2021 4:43:19 PM	57438
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2021 4:43:19 PM	57438
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2021 4:43:19 PM	57438
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	1/11/2021 4:43:19 PM	57438

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 222 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-019

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/11/2021 11:07:24 AM	57445
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/11/2021 11:07:24 AM	57445
Surr: DNOP	68.3	30.4-154		%Rec	1	1/11/2021 11:07:24 AM	57445
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2021 5:06:57 PM	57438
Surr: BFB	103	75.3-105		%Rec	1	1/11/2021 5:06:57 PM	57438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/11/2021 5:06:57 PM	57438
Toluene	ND	0.049		mg/Kg	1	1/11/2021 5:06:57 PM	57438
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2021 5:06:57 PM	57438
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2021 5:06:57 PM	57438
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	1/11/2021 5:06:57 PM	57438

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 223 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-020

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/11/2021 11:31:30 AM	57445
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/11/2021 11:31:30 AM	57445
Surr: DNOP	73.2	30.4-154		%Rec	1	1/11/2021 11:31:30 AM	57445
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/11/2021 5:30:34 PM	57438
Surr: BFB	103	75.3-105		%Rec	1	1/11/2021 5:30:34 PM	57438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/11/2021 5:30:34 PM	57438
Toluene	ND	0.050		mg/Kg	1	1/11/2021 5:30:34 PM	57438
Ethylbenzene	ND	0.050		mg/Kg	1	1/11/2021 5:30:34 PM	57438
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2021 5:30:34 PM	57438
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	1/11/2021 5:30:34 PM	57438

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101331

Date Reported: 1/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 224 @4'

Project: CWMS Release

Collection Date: 1/7/2021

Lab ID: 2101331-021

Matrix: SOIL

Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	1/11/2021 11:55:18 AM	57445
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/11/2021 11:55:18 AM	57445
Surr: DNOP	58.6	30.4-154		%Rec	1	1/11/2021 11:55:18 AM	57445
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/11/2021 5:54:09 PM	57438
Surr: BFB	102	75.3-105		%Rec	1	1/11/2021 5:54:09 PM	57438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	1/11/2021 5:54:09 PM	57438
Toluene	ND	0.049		mg/Kg	1	1/11/2021 5:54:09 PM	57438
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2021 5:54:09 PM	57438
Xylenes, Total	ND	0.098		mg/Kg	1	1/11/2021 5:54:09 PM	57438
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	1/11/2021 5:54:09 PM	57438

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101331

19-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57497	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57497	RunNo: 74580								
Prep Date: 1/12/2021	Analysis Date: 1/12/2021	SeqNo: 2632348	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57497	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57497	RunNo: 74580								
Prep Date: 1/12/2021	Analysis Date: 1/12/2021	SeqNo: 2632349	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.5	90	110			

Sample ID: MB-57509	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57509	RunNo: 74555								
Prep Date: 1/12/2021	Analysis Date: 1/13/2021	SeqNo: 2632792	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57509	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57509	RunNo: 74555								
Prep Date: 1/12/2021	Analysis Date: 1/13/2021	SeqNo: 2632793	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.8	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101331

19-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57445	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 57445	RunNo: 74518								
Prep Date: 1/11/2021	Analysis Date: 1/11/2021	SeqNo: 2630575	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		87.8	30.4	154			

Sample ID: LCS-57445	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 57445	RunNo: 74518								
Prep Date: 1/11/2021	Analysis Date: 1/11/2021	SeqNo: 2630576	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.7	68.9	141			
Surr: DNOP	4.4		5.000		88.0	30.4	154			

Sample ID: 2101331-014AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: FL 217 @4'	Batch ID: 57445	RunNo: 74517								
Prep Date: 1/11/2021	Analysis Date: 1/11/2021	SeqNo: 2630637	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.7	48.59	0	93.0	15	184			
Surr: DNOP	4.0		4.859		81.8	30.4	154			

Sample ID: 2101331-014AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: FL 217 @4'	Batch ID: 57445	RunNo: 74517								
Prep Date: 1/11/2021	Analysis Date: 1/11/2021	SeqNo: 2630638	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.6	47.85	0	94.8	15	184	0.327	23.9	
Surr: DNOP	3.9		4.785		81.6	30.4	154	0	0	

Sample ID: MB-57444	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 57444	RunNo: 74585								
Prep Date: 1/11/2021	Analysis Date: 1/12/2021	SeqNo: 2632906	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		108	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2101331

19-Jan-21

Client: Mewbourne Oil Company

Project: CWMS Release

Sample ID: LCS-57444		SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS		Batch ID: 57444			RunNo: 74585					
Prep Date: 1/11/2021		Analysis Date: 1/12/2021			SeqNo: 2632907		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	105	68.9	141			
Surr: DNOP	5.2		5.000		103	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101331

19-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-57438	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 57438		RunNo: 74532							
Prep Date: 1/9/2021	Analysis Date: 1/11/2021		SeqNo: 2631150		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		106	75.3	105			S

Sample ID: lcs-57438	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 57438		RunNo: 74532							
Prep Date: 1/9/2021	Analysis Date: 1/11/2021		SeqNo: 2631151		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	72.5	106			
Surr: BFB	1200		1000		116	75.3	105			S

Sample ID: 2101331-015ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: FL 218 @4'	Batch ID: 57438		RunNo: 74532							
Prep Date: 1/9/2021	Analysis Date: 1/11/2021		SeqNo: 2631154		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	24.98	0	100	61.3	114			
Surr: BFB	1100		999.0		112	75.3	105			S

Sample ID: 2101331-015amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: FL 218 @4'	Batch ID: 57438		RunNo: 74532							
Prep Date: 1/9/2021	Analysis Date: 1/11/2021		SeqNo: 2631155		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.83	0	93.7	61.3	114	7.24	20	
Surr: BFB	1100		993.0		112	75.3	105	0	0	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101331

19-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-57438	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 57438	RunNo: 74532								
Prep Date: 1/9/2021	Analysis Date: 1/11/2021	SeqNo: 2631200	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID: LCS-57438	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 57438	RunNo: 74532								
Prep Date: 1/9/2021	Analysis Date: 1/11/2021	SeqNo: 2631201	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.2	80	120			
Toluene	0.98	0.050	1.000	0	98.0	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.9	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.3	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID: 2101331-014ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: FL 217 @4'	Batch ID: 57438	RunNo: 74532								
Prep Date: 1/9/2021	Analysis Date: 1/11/2021	SeqNo: 2631203	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.024	0.9756	0.01424	98.4	76.3	120			
Toluene	1.0	0.049	0.9756	0.01424	101	78.5	120			
Ethylbenzene	1.0	0.049	0.9756	0	103	78.1	124			
Xylenes, Total	3.0	0.098	2.927	0.02082	102	79.3	125			
Surr: 4-Bromofluorobenzene	1.0		0.9756		102	80	120			

Sample ID: 2101331-014amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: FL 217 @4'	Batch ID: 57438	RunNo: 74532								
Prep Date: 1/9/2021	Analysis Date: 1/11/2021	SeqNo: 2631204	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	0.9814	0.01424	97.3	76.3	120	0.511	20	
Toluene	1.0	0.049	0.9814	0.01424	101	78.5	120	0.421	20	
Ethylbenzene	1.0	0.049	0.9814	0	102	78.1	124	0.552	20	
Xylenes, Total	3.0	0.098	2.944	0.02082	102	79.3	125	0.00583	20	
Surr: 4-Bromofluorobenzene	1.0		0.9814		102	80	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101331

19-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: Ics-57437	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 57437	RunNo: 74520								
Prep Date: 1/9/2021	Analysis Date: 1/10/2021	SeqNo: 2630646	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	112	80	120			
Toluene	1.1	0.050	1.000	0	106	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.4	0.10	3.000	0	113	80	120			
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		104	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		112	70	130			
Surr: Toluene-d8	0.50		0.5000		99.6	70	130			

Sample ID: mb-57437	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 57437	RunNo: 74520								
Prep Date: 1/9/2021	Analysis Date: 1/10/2021	SeqNo: 2630647	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.6	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		111	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101331

19-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

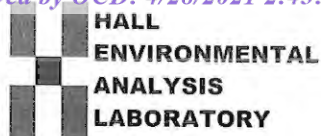
Sample ID: lcs-57437	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batch ID: 57437			RunNo: 74520						
Prep Date: 1/9/2021	Analysis Date: 1/10/2021			SeqNo: 2630672		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.2	70	130			
Surr: BFB	540		500.0		107	70	130			

Sample ID: mb-57437	SampType: MBLK			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: PBS	Batch ID: 57437			RunNo: 74520						
Prep Date: 1/9/2021	Analysis Date: 1/10/2021			SeqNo: 2630673		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		103	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2101331

RcptNo: 1

Received By: Emily Mocho

1/9/2021 8:40:00 AM

Completed By: Emily Mocho

1/9/2021 9:13:23 AM

Reviewed By: DJF 1/9/2021

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(≤ 2 or >12 unless noted)

Adjusted?

Checked by: EM 1/9/21

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.2	Good				

Released to Imaging: 8/23/2021 11:37:48 AM

Turn-Around Time: 5 Day

☒ Standard ☐ Rush

Project Name: CWMS Release

Project #: 13296

Project Manager: Lance Cresshaw

Sampler: Ward Morris

On Ice: ☒ Yes ☐ No

☐ Standard ☐ Level 4 (Full Validation)


Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other☐ EDD (Type)

Cooler Temp (including CF): 2.4 - 0.2 = 2.2 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX MTG	TPH	8081 Pesticides	EDB (Methoxy)	PAHs by EPCRA 8 Me	C/F, Br, N	8260 (VOA)	8270 (Semi-VOCs)	Total Coliform
1/7/21		Soil	FL 102 @ 5'	1	Ice	001						X			
1/7/21		Soil	FL 98 @ 5'	1	Ice	002						x			
1/7/21		Soil	FL 99 @ 5'	1	Ice	003						x			
1/7/21		Soil	FL 192 @ 5'	1	Ice	004						x			
1/7/21		Soil	FL 208 @ 4'	1	Ice	005	x	x							
1/7/21		Soil	FL 209 @ 4'	1	Ice	006	x	x							
1/7/21		Soil	FL 210 @ 4'	1	Ice	007	x	x							
1/7/21		Soil	FL 211 @ 4'	1	Ice	008	x	x							
1/7/21		Soil	FL 212 @ 4'	1	Ice	009	x	x							
1/7/21		Soil	FL 213 @ 4'	1	Ice	010	x	x							
1/7/21		Soil	FL 214 @ 4'	1	Ice	011	x	x							
1/7/21		Soil	FL 215 @ 4'	1	Ice	012	x	x							

Date:	Time:	Relinquished by:
9/7/21	11000	Leonel Mojica

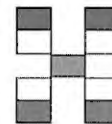
Received by:	Via:	Date	Time
		1/7/21	1500

Remarks: Please email results to pm@atechenv.com

Date: Hba	Time: 1900	Relinquished by: [Signature]
-----------	------------	------------------------------

Received by:	Via:	Date	Time
Em courier		11/9/21	840

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

Received by OCD: 4/28/2021 2:43:51 PM

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Released to Imaging: 8/23/2021 11:37:48 AM

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time: 5 days

☒ Standard ☐ Rush

Project Name:

CWMS RELEASE

Project #:

13296

Project Manager:

Worcester

Sampler: Lowell Hanks

On Ice: ☒ Yes ☐ No

of Coolers:

Cooler Temp (including CF): $2.4 - 0.2 = 2.2 (^{\circ}\text{C})$ Container
Type and #Preservative
Type

HEAL No.
2101331

Date	Time	Matrix	Sample Name
------	------	--------	-------------

6/7/21	Soil	FL 216	@ 4'
1/7/21	Soil	FL 217	@ 4'
1/7/21	Soil	FL 218	@ 4'
1/7/21	Soil	FL 219	@ 4'
1/7/21	Soil	FL 220	@ 4'
1/7/21	Soil	FL 221	@ 4'
1/7/21	Soil	FL 222	@ 4'
1/7/21	Soil	FL 223	@ 4'
1/7/21	Soil	FL 224	@ 4'

1	Tree	013
1	Tree	014
1	Tree	015
1	Tree	016
1	Tree	017
1	Tree	018
1	Tree	019
1	Tree	020
1	Tree	021

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107


Analysis Request

[illegible]

Date:	Time:	Relinquished by:
1/7/21	1600	Heard Morris

Received by:	Via:	Date	Time
<i>A. Cummings</i>		1/7/21	1600

Remarks:	Please email results to PM@etchemv.com
----------	--

Date: 4/21	Time: 1900	Relinquished by: 
---------------	---------------	---

Received by: Via: Date Time
 9m courier 1/9/21 840



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

January 29, 2021

Lance Crenshaw
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX

RE: CWMS Release

OrderNo.: 2101699

Dear Lance Crenshaw:

Hall Environmental Analysis Laboratory received 37 sample(s) on 1/20/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 1 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-001

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	650	60		mg/Kg	20	1/21/2021 9:25:37 PM	57674

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 3 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-002

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1000	60		mg/Kg	20	1/21/2021 9:38:02 PM	57674

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 4 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-003

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	310	61		mg/Kg	20	1/21/2021 9:50:27 PM	57674

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical ReportLab Order **2101699**Date Reported: **1/29/2021****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Mewbourne Oil Company**Client Sample ID:** FL 6 @ 4'**Project:** CWMS Release**Collection Date:** 1/19/2021**Lab ID:** 2101699-004**Matrix:** SOIL**Received Date:** 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	210	60		mg/Kg	20	1/21/2021 10:02:51 PM	57674

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 7 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-005

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1100	59		mg/Kg	20	1/21/2021 10:40:04 PM	57674

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 11 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-006

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	390	59		mg/Kg	20	1/21/2021 10:52:29 PM	57674

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 12 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-007

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1700	59		mg/Kg	20	1/21/2021 11:04:53 PM	57674

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 14 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-008

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1100	60		mg/Kg	20	1/21/2021 11:17:18 PM	57674

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 16 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-009

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1000	60		mg/Kg	20	1/21/2021 11:29:43 PM	57674

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 19 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-010

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1400	60		mg/Kg	20	1/21/2021 11:42:08 PM	57674

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 21 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-011

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	870	60		mg/Kg	20	1/22/2021 1:18:10 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 25 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-012

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	900	60		mg/Kg	20	1/22/2021 1:30:35 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 26 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-013

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1700	60		mg/Kg	20	1/22/2021 1:42:59 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 28 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-014

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	710	60		mg/Kg	20	1/22/2021 1:55:23 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 31 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-015

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	430	60		mg/Kg	20	1/22/2021 2:07:48 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 32 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-016

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	340	61		mg/Kg	20	1/22/2021 2:45:01 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 33 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-017

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1300	60		mg/Kg	20	1/22/2021 2:57:25 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 36 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-018

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	87	60		mg/Kg	20	1/22/2021 3:09:50 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 37 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-019

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	840	60		mg/Kg	20	1/22/2021 3:22:14 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 38 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-020

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3500	150		mg/Kg	50	1/25/2021 3:39:55 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 47 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-021

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2200	61		mg/Kg	20	1/22/2021 3:47:03 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 48 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-022

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	780	60		mg/Kg	20	1/22/2021 3:59:28 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 54 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-023

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	910	60		mg/Kg	20	1/22/2021 4:11:53 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 58 @ 4'

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-024

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	870	60		mg/Kg	20	1/22/2021 4:24:17 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 59

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-025

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	430	60		mg/Kg	20	1/22/2021 4:36:42 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 62

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-026

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1600	60		mg/Kg	20	1/22/2021 5:13:56 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 67

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-027

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1300	60		mg/Kg	20	1/22/2021 5:26:21 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 72

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-028

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1900	60		mg/Kg	20	1/22/2021 5:38:45 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 73

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-029

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1800	60		mg/Kg	20	1/22/2021 5:51:10 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 79

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-030

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2300	150		mg/Kg	50	1/25/2021 3:52:19 PM	57687

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 80

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-031

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2100	60		mg/Kg	20	1/22/2021 11:01:22 PM	57697

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: NW 9

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-032

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	91	60		mg/Kg	20	1/22/2021 11:13:47 PM	57697
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	1/27/2021 8:25:08 AM	57756
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/27/2021 8:25:08 AM	57756
Surr: DNOP	98.9	30.4-154		%Rec	1	1/27/2021 8:25:08 AM	57756
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/28/2021 12:49:34 AM	57754
Surr: BFB	96.3	75.3-105		%Rec	1	1/28/2021 12:49:34 AM	57754
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	1/28/2021 12:49:34 AM	57754
Toluene	ND	0.048		mg/Kg	1	1/28/2021 12:49:34 AM	57754
Ethylbenzene	ND	0.048		mg/Kg	1	1/28/2021 12:49:34 AM	57754
Xylenes, Total	ND	0.097		mg/Kg	1	1/28/2021 12:49:34 AM	57754
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	1/28/2021 12:49:34 AM	57754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: WW 23

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-033

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	59		mg/Kg	20	1/22/2021 11:26:11 PM	57697
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	1/27/2021 8:49:05 AM	57756
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/27/2021 8:49:05 AM	57756
Surr: DNOP	92.6	30.4-154		%Rec	1	1/27/2021 8:49:05 AM	57756
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/28/2021 2:00:28 AM	57754
Surr: BFB	93.2	75.3-105		%Rec	1	1/28/2021 2:00:28 AM	57754
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/28/2021 2:00:28 AM	57754
Toluene	ND	0.050		mg/Kg	1	1/28/2021 2:00:28 AM	57754
Ethylbenzene	ND	0.050		mg/Kg	1	1/28/2021 2:00:28 AM	57754
Xylenes, Total	ND	0.099		mg/Kg	1	1/28/2021 2:00:28 AM	57754
Surr: 4-Bromofluorobenzene	96.7	80-120		%Rec	1	1/28/2021 2:00:28 AM	57754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: SW 12

Project: CWMS Release

Collection Date: 1/19/2021

Lab ID: 2101699-034

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	77	60		mg/Kg	20	1/22/2021 11:38:36 PM	57697

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 164 @ 4'

Project: CWMS Release

Collection Date: 1/18/2021

Lab ID: 2101699-035

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	63	60		mg/Kg	20	1/22/2021 11:51:00 PM	57697

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 176 @ 4'

Project: CWMS Release

Collection Date: 1/18/2021

Lab ID: 2101699-036

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	110	60		mg/Kg	20	1/23/2021 12:28:14 AM	57697

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101699

Date Reported: 1/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: FL 99 @ 5'

Project: CWMS Release

Collection Date: 1/18/2021

Lab ID: 2101699-037

Matrix: SOIL

Received Date: 1/20/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2700	150		mg/Kg	50	1/25/2021 4:04:44 PM	57697

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101699

29-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57674	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57674	RunNo: 74763								
Prep Date: 1/21/2021	Analysis Date: 1/21/2021	SeqNo: 2638800	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57674	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57674	RunNo: 74763								
Prep Date: 1/21/2021	Analysis Date: 1/21/2021	SeqNo: 2638801	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.9	90	110			

Sample ID: MB-57687	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57687	RunNo: 74811								
Prep Date: 1/22/2021	Analysis Date: 1/22/2021	SeqNo: 2640243	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57687	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57687	RunNo: 74811								
Prep Date: 1/22/2021	Analysis Date: 1/22/2021	SeqNo: 2640244	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.8	90	110			

Sample ID: MB-57697	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57697	RunNo: 74811								
Prep Date: 1/22/2021	Analysis Date: 1/22/2021	SeqNo: 2640290	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57697	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57697	RunNo: 74811								
Prep Date: 1/22/2021	Analysis Date: 1/22/2021	SeqNo: 2640291	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.8	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101699

29-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: MB-57756	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 57756	RunNo: 74881								
Prep Date: 1/27/2021	Analysis Date: 1/27/2021	SeqNo: 2643135	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	30.4	154			

Sample ID: LCS-57756	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 57756	RunNo: 74881								
Prep Date: 1/27/2021	Analysis Date: 1/27/2021	SeqNo: 2643136	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.8	68.9	141			
Surr: DNOP	4.7		5.000		93.8	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101699

29-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-57754	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 57754	RunNo: 74882								
Prep Date: 1/26/2021	Analysis Date: 1/28/2021	SeqNo: 2643559 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.4	75.3	105			

Sample ID: lcs-57754	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 57754	RunNo: 74882								
Prep Date: 1/26/2021	Analysis Date: 1/28/2021	SeqNo: 2643560 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.5	80	120			
Surr: BFB	1100		1000		106	75.3	105			S

Sample ID: 2101699-032ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: NW 9	Batch ID: 57754	RunNo: 74882								
Prep Date: 1/26/2021	Analysis Date: 1/28/2021	SeqNo: 2643562 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	24.75	0	114	61.3	114			
Surr: BFB	1100		990.1		110	75.3	105			S

Sample ID: 2101699-032amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: NW 9	Batch ID: 57754	RunNo: 74882								
Prep Date: 1/26/2021	Analysis Date: 1/28/2021	SeqNo: 2643563 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	24.88	0	119	61.3	114	4.62	20	S
Surr: BFB	1100		995.0		108	75.3	105	0	0	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2101699

29-Jan-21

Client: Mewbourne Oil Company**Project:** CWMS Release

Sample ID: mb-57754	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 57754	RunNo: 74882								
Prep Date: 1/26/2021	Analysis Date: 1/28/2021	SeqNo: 2643593 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		96.6	80	120			

Sample ID: LCS-57754	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 57754	RunNo: 74882								
Prep Date: 1/26/2021	Analysis Date: 1/28/2021	SeqNo: 2643594 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.5	80	120			
Toluene	0.98	0.050	1.000	0	97.8	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

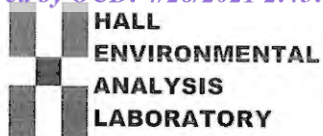
Sample ID: 2101699-033ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: WW 23	Batch ID: 57754	RunNo: 74882								
Prep Date: 1/26/2021	Analysis Date: 1/28/2021	SeqNo: 2643597 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9737	0	109	76.3	120			
Toluene	1.1	0.049	0.9737	0.01202	112	78.5	120			
Ethylbenzene	1.1	0.049	0.9737	0	115	78.1	124			
Xylenes, Total	3.4	0.097	2.921	0.01668	115	79.3	125			
Surr: 4-Bromofluorobenzene	0.95		0.9737		97.7	80	120			

Sample ID: 2101699-033amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: WW 23	Batch ID: 57754	RunNo: 74882								
Prep Date: 1/26/2021	Analysis Date: 1/28/2021	SeqNo: 2643598 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9709	0	111	76.3	120	1.57	20	
Toluene	1.1	0.049	0.9709	0.01202	114	78.5	120	0.959	20	
Ethylbenzene	1.1	0.049	0.9709	0	115	78.1	124	0.0208	20	
Xylenes, Total	3.4	0.097	2.913	0.01668	115	79.3	125	0.0956	20	
Surr: 4-Bromofluorobenzene	0.95		0.9709		97.4	80	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Mewbourne Oil Company

Work Order Number: 2101699

RcptNo: 1

Received By: Cheyenne Cason 1/20/2021 8:00:00 AM

Completed By: Erin Melendrez 1/20/2021 8:34:25 AM

Reviewed By: *SGC 1/20/21*

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? ☐

Checked by: *SPA 1-20-21*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good				
2	0.6	Good				

Released to Imaging: 8/23/2021 11:37:48 AM

Turn-Around Time: 5 Day

☒ Standard ☐ Rush

Project Name: CWMS RELEASE

Project #: 13296

Project Manager:

Sampler: Ward M. 1st

☐ Standard ☐ Level 4 (Full Validation)

On Ice: ☒ Yes ☐ No

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other☐ EDD (Type)

of Coolers: 2

Cooler Temp (including CF): 5.0 (°C)

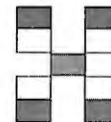
Date	Time	Matrix	Sample Name	Cooler Temp(including CF): <i>Sep Burr</i> (°C)			BTEX / MTM	TPH:8015D(8081 Pesticid	EDB (Metho	PAHs by 83	RCRA 8 Me	<input checked="" type="checkbox"/> Cl ₂ F, Br, N	8260 (VOA)	8270 (Semi-	Total Colifon			
				Container Type and #	Preservative Type	HEAL No.													
1/19/21		Soil	FL 1 @ 4'	1	Ice	-001							X						
1/19/21		Soil	FL 3 @ 4'	1	Ice	-002							X						
1/19/21		Soil	FL 4 @ 4'	1	Ice	-003							X						
1/19/21		Soil	FL 6 @ 4'	1	Ice	-004							X						
1/19/21		Soil	FL 7 @ 4'	1	Ice	-005							X						
1/19/21		Soil	FL 11 @ 4'	1	Ice	-006							X						
1/19/21		Soil	FL 12 @ 4'	1	Ice	-007							1						
1/19/21		Soil	FL 14 @ 4'	1	Ice	-008							X						
1/19/21		Soil	FL 16 @ 4'	1	Ice	-009							X						
1/19/21		Soil	FL 19 @ 4'	1	Ice	-010							X						
1/19/21		Soil	FL 21 @ 4'	1	Ice	-011							X						
1/19/21		Soil	FL 25 @ 4'	1	Ice	-012							X						

Date:	Time:	Relinquished by:
11/19/21	1600	Heavenly Bodies

Received by:	Via:	Date	Time
Adminis		1/7/21	1600

Remarks:
Please email results to Am@etechenv.com
 $Z.1 \pm 0 = 2.1$
 $G.G \pm 0 = 0.6$

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

Received by OCD: 4/28/2021 2:43:51 PM

Page 506 of 559

Chain-of-Custody Record

Turn-Around Time: 5 Day

Client: NEWBOURNE

☒ Standard ☐ Rush

Mailing Address:

Project Name:

CWMS RELEASE

Phone #:

Project #:

13296

email or Fax#:

Project Manager:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Sampler: Lance Crenshaw

On Ice: ☒ Yes ☐ No

of Coolers:

Cooler Temp (including CF): (°C)

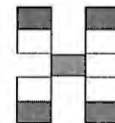
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
1/19/21		Soil	FL 26 @ 4'	1	Ice	-013
1/19/21		Soil	FL 28 @ 4'	1	Ice	-014
1/19/21		Soil	FL 31 @ 4'	1	Ice	-015
1/19/21		Soil	FL 32 @ 4'	1	Ice	-016
1/19/21		Soil	FL 33 @ 4'	1	Ice	-017
1/19/21		Soil	FL 36 @ 4'	1	Ice	-018
1/19/21		Soil	FL 37 @ 4'	1	Ice	-019
1/19/21		Soil	FL 38 @ 4'	1	Ice	-020
1/19/21		Soil	FL 47 @ 4'	1	Ice	-021
1/19/21		Soil	FL 48 @ 4'	1	Ice	-022
1/19/21		Soil	FL 54 @ 4'	1	Ice	-023
1/19/21		Soil	FL 58 @ 4'	1	Ice	-024

Date: 1/19/21 Time: 1000 Relinquished by: [Signature]

Received by: [Signature] Via: [Signature] Date: 1/17/21 Time: 1000

Date: 1/19/21 Time: 1900 Relinquished by: [Signature]

Received by: [Signature] Via: [Signature] Date: 1/20/21 Time: 0800



HALL ENVIRONMENTAL ANALYSIS LABORATORY

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4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)										
						X													
						X													
						X													
						X													
						X													
						X													
						X													
						X													
						X													
						X													
						X													
						X													

Remarks: Please email results to pm@etechenv.com

Chain-of-Custody Record

Turn-Around Time:

Client: NEWBOURNE☒ Standard ☐ Rush

Mailing Address:

Project Name:

CWMS RELEASE

Project #:

13296

Phone #:

email or Fax#:

Project Manager:

Lance Crenshaw

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

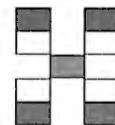
Sampler:

On Ice: ☐ Yes ☐ No

of Coolers:

Cooler Temp (including CF): (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
1/19/21		Soil	FL 59	1	Ice	-025
1/19/21		Soil	FL 62	1	Ice	-026
1/19/21		Soil	FL 67	1	Ice	-027
1/19/21		Soil	FL 72	1	Ice	-028
1/19/21		Soil	FL 73	1	Ice	-029
1/19/21		Soil	FL 79	1	Ice	-030
1/19/21		Soil	FL 80	1	Ice	-031
1/19/21		Soil	NW 9	1	Ice	-032
1/19/21		Soil	WW 23	1	Ice	-033
1/19/21		Soil	SW 12	1	Ice	-034

HALL ENVIRONMENTAL
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(Cl) F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)										
						x													
						x													
						x													
						x													
						x													
						x													
						x													
x	x					x													
x	x					x													
x	x																		

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1/19/21	1600	<u>Heard Lopez</u>	<u>Adm</u>		1/19/21	1600
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1/19/21	1900	<u>Adm</u>	<u>Adm</u>		1/20/21	0800

Remarks: Please email results to pm@atechenv.com

Released to Imaging: 8/23/2021 11:37:48 AM

Turn-Around Time: 5 Days

☒ Standard ☐ Rush

Project Name:

CWMS Release

Project #:

13296

Project Manager:

Lance Creshaw

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other☐ EDD (Type)

Sampler: heard Mojos

On Ice: ☒ Yes ☐ No

of Coolers: 2

Cooler Temp (including CF): 32.0 (°C)

Date	Time	Matrix	Sample Name
------	------	--------	-------------

Container Type and #	Material	Volume	Weight	Notes
1
2
3
4
5
6
7
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9
10
11
12
13
14
15
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17
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93
94
95
96
97
98
99
100

Preservative
Type

HEAL No.

2101699

1/18/21		S-11	FL 164 @ 4'	Glass, 1	Free	-035
---------	--	------	-------------	----------	------	------

1/18/21	Soil	FL 176 @ 4'	Glass: 1	Inc	-0360
---------	------	-------------	----------	-----	-------

1/18/21		Sol	FL 99 @ 5	Glass	1	Ice	-037
---------	--	-----	-----------	-------	---	-----	------

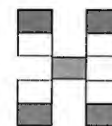
Date:	Time:	Relinquished by:
1/18/21	1330	Leonel Moises

Received by:	Via:	Date	Time
Clummins		7/19/21	1330
Received by:	Via:	Date	Time

Date: 1/19/21	Time: 1900	Relinquished by: G. Cummins
---------------	------------	-----------------------------

Received by: Cam Via: Cam Date: 1/20/21 Time: 0800

Remarks:
Please email results to pm@etcchee1.
 $0.6 \pm 0 = 0.6$ $2.1 \pm 0 = 2.1$



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

Appendix C

Photographic Log

Photographic Log



Photo Number: 1	
Photo Direction: Southwest	
Photo Description: Produced Water Release	

Photo Number: 2	
Photo Direction: Northwest	
Photo Description: Produced Water Release	

Photographic Log


Photo Number: 3	 <p>Oct 20, 2020 at 8:29:32 AM +32.261694,-104.163476 ±5.00m 180° S</p>
Photo Direction: South	
Photo Description: Produced Water Release	

Photo Number: 4	 <p>Oct 20, 2020 at 8:30:21 AM +32.261526,-104.163587 ±5.00m 196° S</p>
Photo Direction: South-Southwest	
Photo Description: Produced Water Release	

Photographic Log


Photo Number: 5	
Photo Direction: South-Southeast	
Photo Description: Produced Water Release	

Photo Number: 6	
Photo Direction: Southeast	
Photo Description: Produced Water Release	

Photographic Log


Photo Number: 7	
Photo Direction: Northwest	
Photo Description: Produced Water Release	

Photo Number: 8	
Photo Direction: North	
Photo Description: Produced Water Release	

Photographic Log

Photo Number: 9	 <p>Oct 20, 2020 at 8:36:40 AM +32.259323,-104.161961 ±5.00m 310° NW</p>
Photo Direction: Northwest	
Photo Description: Produced Water Release	

Photo Number: 10	 <p>Oct 20, 2020 at 8:37:25 AM +32.259557,-104.162118 ±5.00m 312° NW</p>
Photo Direction: Northwest	
Photo Description: Produced Water Release	

Photographic Log

Photo Number: 11	
Photo Direction: West-Southwest	
Photo Description: Excavation	

Photo Number: 12	
Photo Direction: East	
Photo Description: Excavation	

Photographic Log

Photo Number: 13	
Photo Direction: West	
Photo Description: Excavation	

Photo Number: 14	
Photo Direction: East	
Photo Description: Excavation	

Photographic Log

Photo Number: 15	 <p>31/12/2020 11:33:27 +32.261868,-104.162899 225° SE</p>
Photo Direction: Southeast	
Photo Description: Excavation	

Photo Number: 16	 <p>01/02/2021 11:14:26 +32.259396,-104.161982 286° W</p>
Photo Direction: West	
Photo Description: Excavation (During Backfilling)	

Photographic Log

Photo Number: 17	 <p>27/01/2021 14:29:37 +32.260292,-104.163090 136° SE</p>
Photo Direction: Southeast	
Photo Description: Excavation (During Backfilling)	

Photo Number: 18	 <p>27/01/2021 10:00:16 +32.261744,-104.163355 101° E</p>
Photo Direction: East	
Photo Description: Excavation (During Backfilling)	

Photographic Log

Photo Number: 19	
Photo Direction: Northeast	
Photo Description: Remediated Area (After Backfilling & Regrading)	

Photo Number: 20	
Photo Direction: Northeast	
Photo Description: Remediated Area (After Backfilling & Regrading)	

Photographic Log

Photo Number: 21	
Photo Direction: East-Southeast	
Photo Description: Remediated Area (After Backfilling & Regrading)	

Photo Number: 22	
Photo Direction: Southeast	
Photo Description: Remediated Area (After Backfilling & Regrading)	

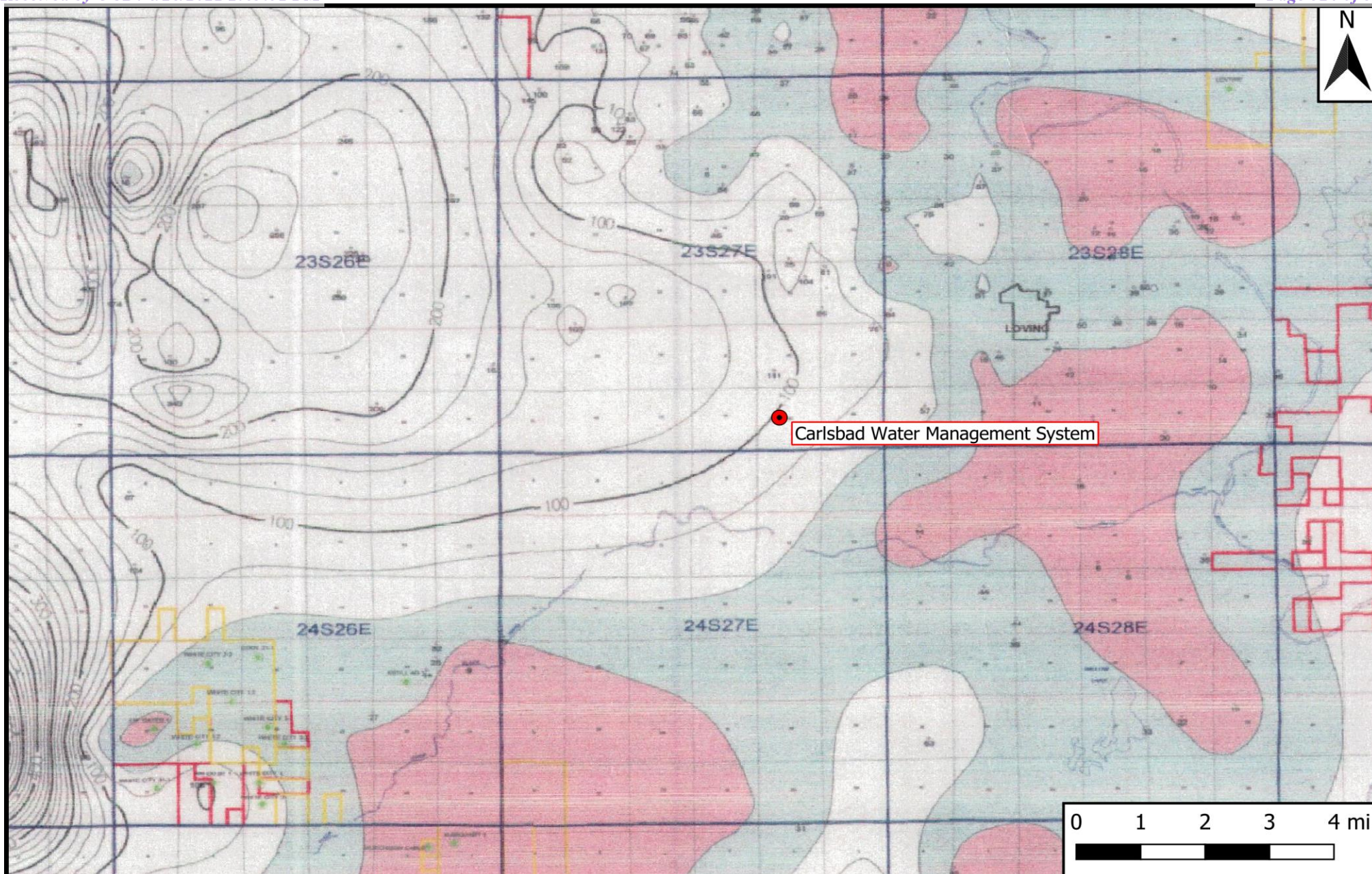
Photographic Log

Photo Number: 23	
Photo Direction: South-Southeast	
Photo Description: Remediated Area (After Backfilling & Regrading)	

Photo Number: 24	
Photo Direction: North-Northeast	
Photo Description: Remediated Area (After Backfilling & Regrading)	

Appendix D

Depth to Groundwater Information



Legend

● Site Location

Figure 4

Inferred Depth to Groundwater Trend Map
 Mewbourne Oil Company
 Carlsbad Water Management System
 GPS: 32.261438, -104.163478
 Eddy County

eTECH
 Environmental & Safety Solutions, Inc.

Drafted: bja

Checked: jwl

Date: 3/10/21



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
C 03031		C	ED	1	3	3	35	23S	27E	578315	3569206*	701	150	67	83

Average Depth to Water: **67 feet**

Minimum Depth: **67 feet**

Maximum Depth: **67 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 578790.16

Northing (Y): 3569721.75

Radius: 804.67

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

10/20/20 10:16 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	03031	1	3	3	35	23S	27E	578315	3569206*

x

Driller License: 685 **Driller Company:** BRAZEAL, JOHN

Driller Name: WAYNE BRAZEAL

Drill Start Date: 06/10/2004	Drill Finish Date: 06/16/2004	Plug Date:
Log File Date: 06/24/2004	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield: 50 GPM
Casing Size: 6.00	Depth Well: 150 feet	Depth Water: 67 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	139	150	Other/Unknown

x

Casing Perforations:	Top	Bottom
	90	150

x

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

10/20/20 10:18 AM

POINT OF DIVERSION SUMMARY



Legend

- Site Location
- Well - USGS
- 1,000-Ft Radius
- 0.5-Mi Radius

Figure 5

USGS Well Proximity Map
Mewbourne Oil Company
Carlsbad Water Management System
GPS: 32.261438, -104.163478
Eddy County



Drafted: bja

Checked: jwl

Date: 3/10/21



National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
United States

GO

Click to hideNews Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#)

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321624104094801

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 321624104094801 23S.27E.26.323332

Eddy County, New Mexico
Latitude 32°16'24", Longitude 104°09'48" NAD27
Land-surface elevation 3,139 feet above NAVD88
The depth of the well is 156 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water level appro statu
1954-02-16			D107.19			2			U		U
1955-01-17			D112.42			2	R		U		U
1956-01-10			D108.77			2			U		U
1957-01-09			D119.35			2	P		U		U
1958-01-16			D104.74			2			U		U
1959-01-09			D119.29			2	P		U		U
1960-01-15			D104.10			2			U		U
1961-01-13			D102.31			2			U		U
1962-01-19			D97.86			2			U		U
1963-01-22			D102.16			2			U		U
1964-01-20			D104.21			2			U		U
1965-01-14			D117.68			2	P		U		U
1966-01-05			D115.60			2			U		U
1967-01-19			D113.96			2			U		U
1968-01-26			D112.32			2			U		U
1969-01-28			D111.92			2			U		U
1970-01-20			D112.49			2			U		U
1971-01-14			D120.74			2			U		U
1972-01-12			D121.66			2			U		U
1973-01-05			D123.34			2			U		U
1974-01-16			D121.74			2			U		U

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement	Water level approval status
1975-01-16			D	123.56			2		U		U
1976-01-13			D	122.91			2		U		U
1977-01-13			D	125.05			2		U		U
1978-01-23			D	128.42			2		U		U
1979-01-18			D	129.94			2		U		U
1981-05-20			D	126.56			2		U		U
1983-01-25			D	124.79			2		U		U
1988-02-11			D	110.98			2		U		U

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	P	Site was being pumped.
Status	R	Site had been pumped recently.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>

Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2020-10-20 12:12:24 EDT

1.49 0.24 nadww01



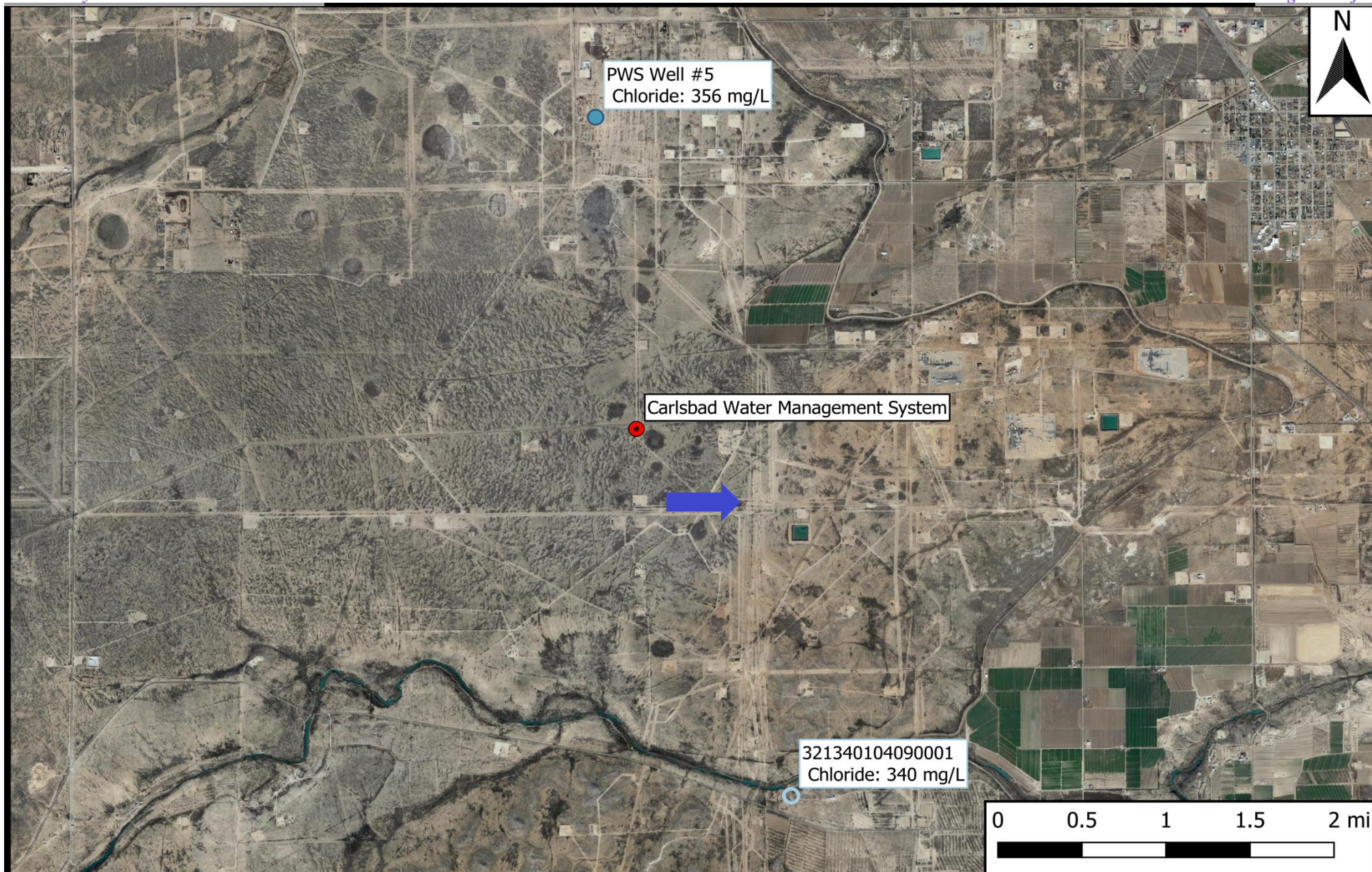
Appendix E

Elevation Profile



Appendix F

Groundwater Quality Data



Legend

- Site Location
- Public Water Supply Well
- USGS Well
- ➔ Inferred Groundwater Gradient

Figure 6

Groundwater Concentration and Gradient Map
Mewbourne Oil Company
Carlsbad Water Management System
GPS: 32.261438, -104.163478
Eddy County



Drafted: bja

Checked: jwl

Date: 11/25/20


```

#
# File created on 2020-11-25 11:36:36 EST
#
# U.S. Geological Survey
#
# This file contains selected water-quality data for stations in the National Water
# Information System water-quality database.  Explanation of codes found in this file are
# followed by the retrieved data.
#
# The data you have secured from the USGS NWISWeb database may include data that have
# not received Director's approval and as such are provisional and subject to revision.
# The data are released on the condition that neither the USGS nor the United States
# Government may be held liable for any damages resulting from its authorized or
# unauthorized use.
#
# To view additional data-quality attributes, output the results using these options:
# one result per row, expanded attributes.  Additional precautions are at:
# https://help.waterdata.usgs.gov/tutorials/water-quality-data/help-using-the-water-quality-data-retrieval-system#Data_retrievals_precautions
#
# agency_cd          - Agency Code
# site_no            - USGS site number
# sample_dt          - Begin date
# sample_tm          - Begin time
# sample_end_dt       - End date
# sample_end_tm       - End time
# sample_start_time_datum_cd - Time datum
# tm_datum_rlbty_cd  - Time datum reliability code
# coll_ent_cd        - Agency Collecting Sample Code
# medium_cd          - Sample Medium Code
# tu_id              - Taxonomic unit code
# body_part_id       - Body part code
# parm_cd            - Parameter code
# remark_cd          - Remark code
# result_va          - Parameter value
# val_qual_tx        - Result value qualifier code
# meth_cd            - Method code
# dqi_cd             - Data-quality indicator code
# rpt_lev_va         - Reporting level
# rpt_lev_cd         - Reporting level type
# lab_std_va         - Lab standard deviation
# anl_ent_cd         - Analyzing entity code
#
# The following parameters are included:
# 00191 - Hydrogen ion, water, unfiltered, calculated, milligrams per liter
# 00405 - Carbon dioxide, water, unfiltered, milligrams per liter
# 00410 - Acid neutralizing capacity, water, unfiltered, fixed endpoint (pH 4.5) titration, field, milligrams per liter as calcium carbonate
# 00440 - Bicarbonate, water, unfiltered, fixed endpoint (pH 4.5) titration, field, milligrams per liter
# 00445 - Carbonate, water, unfiltered, fixed endpoint (pH 8.3) titration, field, milligrams per liter
# 00940 - Chloride, water, filtered, milligrams per liter
# 00945 - Sulfate, water, filtered, milligrams per liter
# 00950 - Fluoride, water, filtered, milligrams per liter
# 00955 - Silica, water, filtered, milligrams per liter as SiO2
#
# Description of sample_start_time_datum_cd:

```

MDT - Mountain Daylight Time
 #
 # Description of tm_datum_rlbty_cd:
 # T - Transferred
 #
 # Description of coll_ent_cd and anl_ent_cd:
 #
 # Description of medium_cd:
 # WG - Groundwater
 #
 # Description of tu_id:
 # https://www.itis.gov/
 #
 # Description of body_part_id:
 #
 # Description of remark_cd:
 #
 # Description of val_qual_tx:
 #
 # Description of meth_cd:
 # ALGOR - Computation by NWIS algorithm
 #
 # Description of dqi_cd:
 # A - Historical data
 #
 # Description of rpt_lev_cd:
 #
 # Data for the following sites are included:
 # USGS 321340104090001 24S.27E.12.300
 #

agency_cd	site_no	sample_dt	sample_tm	sample_end_dt	sample_end_tm	sample_start_time_datum_cd	tm_datum_rlbty_cd
coll_ent_cd	medium_cd	tu_id	body_part_id	parm_cd	remark_cd	result_va	val_qual_tx
rpt_lev_cd	lab_std_va	anl_ent_cd					
5s	15s	10d	5d	10d	5d	3s	1s
6s	11s	8s					
USGS	321340104090001	1974-05-30	14:40	MDT	T	WG	00191
A							0.00003
USGS	321340104090001	1974-05-30	14:40	MDT	T	WG	00405
A							7.2
USGS	321340104090001	1974-05-30	14:40	MDT	T	WG	00410
A							117
USGS	321340104090001	1974-05-30	14:40	MDT	T	WG	00440
A							143
USGS	321340104090001	1974-05-30	14:40	MDT	T	WG	00445
A							0.0
USGS	321340104090001	1974-05-30	14:40	MDT	T	WG	00940
A							340
USGS	321340104090001	1974-05-30	14:40	MDT	T	WG	00945
A							1300
USGS	321340104090001	1974-05-30	14:40	MDT	T	WG	00950
A							0.60
USGS	321340104090001	1974-05-30	14:40	MDT	T	WG	00955
A							17.0



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

November 23, 2020

LANCE CRENSHAW

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington, NM 88260

RE: CARLSBAD WATER MANAGMENT SYSTEM RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 11/20/20 16:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Etech Environmental & Safety Solutions
 LANCE CRENSHAW
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	11/20/2020	Sampling Date:	11/19/2020
Reported:	11/23/2020	Sampling Type:	Water
Project Name:	CARLSBAD WATER MANAGMENT SYSTEM	Sampling Condition:	** (See Notes)
Project Number:	13296	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO NM		

Sample ID: OTIS WELL #5 (H003089-01)

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	356	4.00	11/23/2020	ND	100	100	100	0.00		
TDS 160.1		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	2050	5.00	11/23/2020	ND	494	98.8	500	0.971		

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

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A handwritten signature in black ink, appearing to read "Mike Snyder".

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

RELEASE NOTICE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and brought by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of sales, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services rendered by Cardinal, regardless of whether such claim is based upon any of the above stated causes or otherwise.

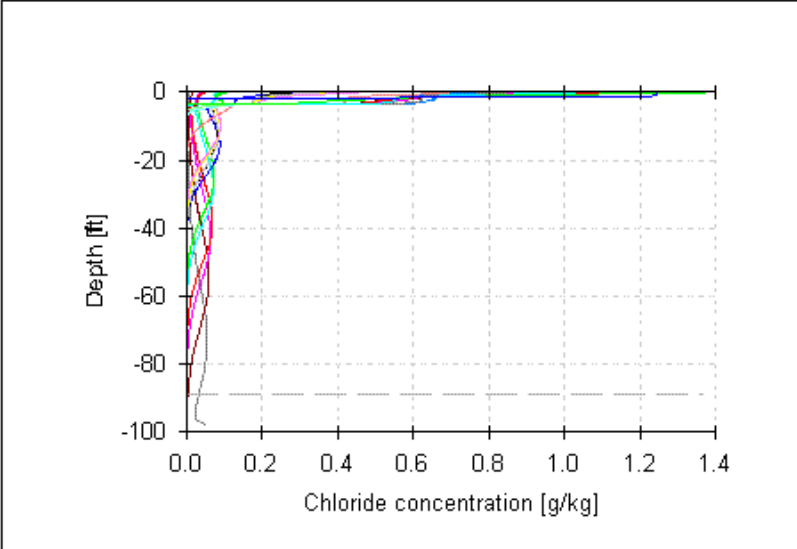
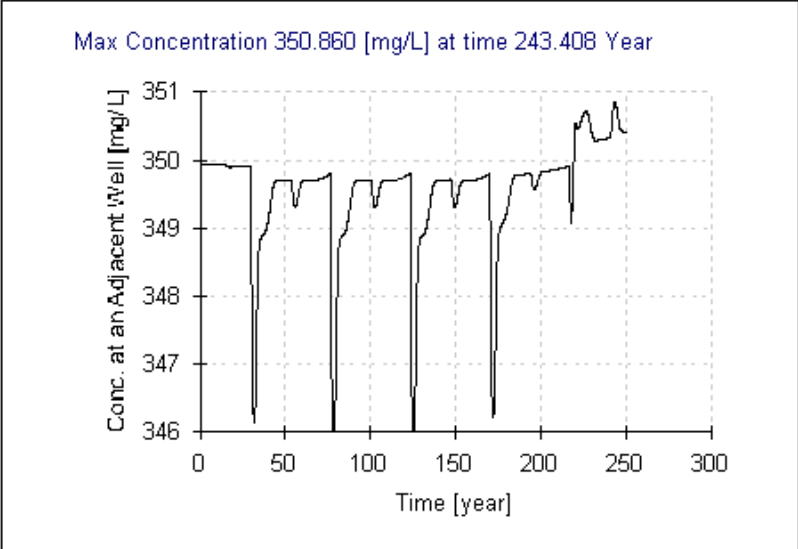
Relinquished By: 		Date: <u>11-20-20</u> Time: <u>1625</u>		Received By: 		Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #: _____	
Relinquished By: _____		Date: _____ Time: _____		Received By: _____		Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Fax #: _____	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: <u>24.3c #13</u>				Sample Condition Cool <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		CHECKED BY: (Initials) <u>JO</u>	
REMARKS: <u>RUSH!</u> <u>email results</u>  <u>PM @ etechenv.com</u>							

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

Appendix G

Chloride Migration Models

Units	Groundwater Characteristics	Source Characteristics
<input type="radio"/> Metric (m) <input checked="" type="radio"/> English (inches)	Background Cl Concentration in Aquifer cGW = <input type="text" value="350"/> [mg/L]	Chloride Load: Max. length of the spill in direction of GW flow:
Climate <input type="text" value="Arid Hot (NM/W.Texas, Hobbs)"/>	Aquifer porosity n = <input type="text" value="0.3"/> [-]	M = <input type="text" value="1.14"/> [kg/m2] L = <input type="text" value="125"/> [ft]
Input for a Distant Well	Groundwater Table Depth D = <input type="text" value="90"/> [ft]	Plant Uptake Trigger
Distance to Well <input type="text" value="150"/> [ft]	Aquifer Thickness H = <input type="text" value="20"/> [ft]	<input checked="" type="radio"/> 1% Input Concentration
Source Width <input type="text" value="50"/> [ft]	Slope of Water Table i = <input type="text" value="0.05"/> [-]	<input type="radio"/> 10% Input Concentration
Longitudinal Dispersivity <input type="text" value="10"/> [-]	Hydraulic Conductivity Ks = <input type="text" value="3.28"/> [ft/d]	Soil Profiles
Transverse Dispersivity <input type="text" value="1"/> [-]	Groundwater Flux Q = <input type="text" value="3.28"/> [ft2/d]	Surface Layer <input type="text" value="Loam"/>
		Soil Profile <input type="text" value="P1 - Medium Sand (30m)"/>

Output Charts	
Quantity 1: <input type="text" value="Chloride concentration [g/kg]"/> Quantity 2: <input type="text" value="Conc. at an Adjacent Well [mg/L]"/>	
 <p>Depth [ft] vs Chloride concentration [g/kg]. The plot shows multiple colored lines representing different scenarios, all starting at 0 g/kg at the surface and increasing with depth. The x-axis ranges from 0.0 to 1.4 g/kg, and the y-axis ranges from 0 to -100 ft.</p>	 <p>Max Concentration 350.860 [mg/L] at time 243.408 Year</p> <p>Conc. at an Adjacent Well [mg/L] vs Time [year]. The plot shows a sawtooth pattern of concentration over time, with peaks around 350 mg/L and troughs around 346 mg/L. The x-axis ranges from 0 to 300 years, and the y-axis ranges from 346 to 351 mg/L.</p>

Depth to Water		Meters		Feet	95	=	2895.60 cm
User provided moist bulk density (rho_m)		0	kg/m ³	1550 kg/m ³ - Moist bulk density used in calculations			
Dry Bulk Density (rho) =		1415	kg/m ³				
Default Vol. Moist. Content (Theta_v) =		0.135					
Calculated moist bulk density (rho_m) =		1550	kg/m ³				

Trench TT1																
Sample Number (increasing depth)	If a Composite Sample from a Depth Interval						Grab Samples				Z	Chl. Conc.	Chl. Load Depth Int.			
	Feet			Meters			z			z						
	Top of Sample	Bottom of Sample	Ave. Depth	Top of Sample	Bottom of Sample	Ave. Depth	Feet	Depth for sample	Meters	Depth for sample				Assigned depth in cm	mg/kg	kg/m ²
1							10	10	0	0	304.8	516	2.44			
2							11	11	0	0	335.28	440	0.23			
3													0.60			
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
Chloride load (kg/m ²)												3.27				

Trench TT2													
Sample Number (increasing depth)	If a Composite Sample from a Depth Interval						Grab Samples				Z	Chl. Conc.	Chl. Load Depth Int.
	Feet			Meters			z		z				
	Top of Sample	Bottom of Sample	Ave. Depth	Top of Sample	Bottom of Sample	Ave. Depth	feet	Depth for sample	meters	Depth for sample			
1							6	6	0	0	Assigned depth in cm 182.88	mg/kg 160	kg/m ² 0.45
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
Chloride load (kg/m ²)													0.45

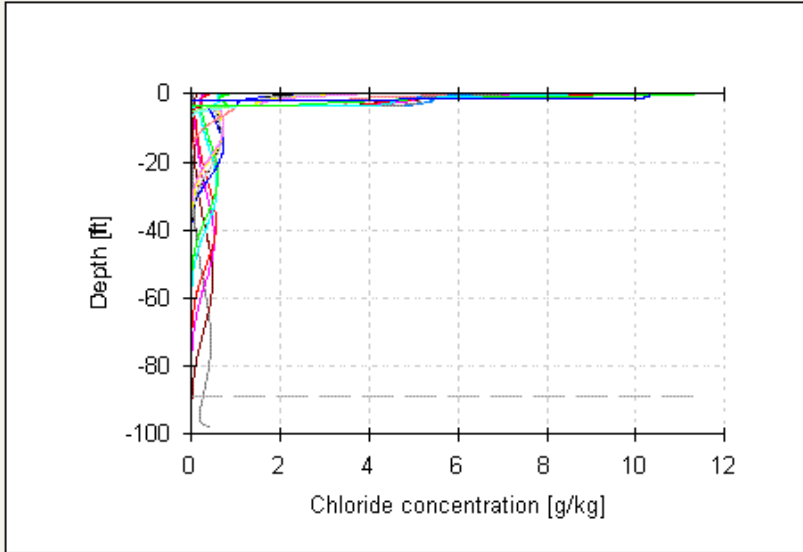
Trench TT3													
Sample Number (increasing depth)	If a Composite Sample from a Depth Interval						Grab Samples				Z	Chl. Conc.	Chl. Load Depth Int.
	Feet			Meters			z		z				
	Top of Sample	Bottom of Sample	Ave. Depth	Top of Sample	Bottom of Sample	Ave. Depth	feet	Depth for sample	meters	Depth for sample			
1							6	6	0	0	Assigned depth in cm 182.88	mg/kg 59	kg/m ² 0.17
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
Chloride load (kg/m ²)												0.17	

Trench TT4													
Sample Number (increasing depth)	If a Composite Sample from a Depth Interval						Grab Samples				Z Assigned depth in cm 213.36	Chl. Conc. mg/kg 200	Chl. Load Depth Int. kg/m ² 0.66
	Feet			Meters			z		z				
	Top of Sample	Bottom of Sample	Ave. Depth	Top of Sample	Bottom of Sample	Ave. Depth	feet	Depth for sample	meters	Depth for sample			
1							7	7	0	0			
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
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19													
20													
21													
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23													
24													
25													
26													
27													
28													
29													
30													
Chloride load (kg/m ²)												0.66	

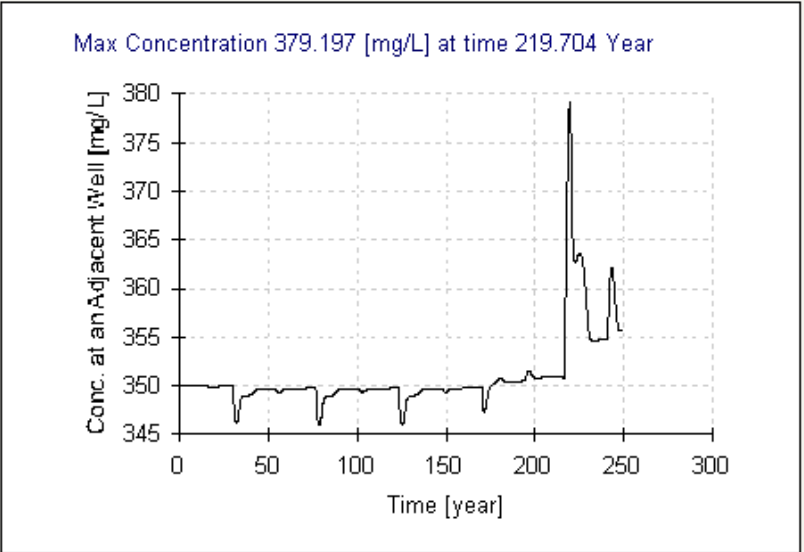
	Proportional Area Weights	Chl. Load of each Borehole	Equal Area Weights	Boring Chl. Load times Proport. Of Area
Trench TT1	0.00	3.27	1.00	0.00
Trench TT2	0.00	0.45	1.00	0.00
Trench TT3	0.00	0.17	1.00	0.00
Trench TT4	0.00	0.66	1.00	0.00
	0		4	
Averaged Chloride Load of All Boreholes			1.14	kg/m ²

Units	Groundwater Characteristics	Source Characteristics
<input type="radio"/> Metric (m) <input checked="" type="radio"/> English (inches)	Background Cl Concentration in Aquifer cGW = <input type="text" value="350"/> [mg/L]	Chloride Load: Max. length of the spill in direction of GW flow:
Climate <input type="text" value="Arid Hot (NM/W.Texas, Hobbs)"/>	Aquifer porosity n = <input type="text" value="0.3"/> [-]	M = <input type="text" value="9.43"/> [kg/m2] L = <input type="text" value="125"/> [ft]
Input for a Distant Well	Groundwater Table Depth D = <input type="text" value="90"/> [ft]	Plant Uptake Trigger <input checked="" type="radio"/> 1% Input Concentration <input type="radio"/> 10% Input Concentration
Distance to Well <input type="text" value="150"/> [ft]	Aquifer Thickness H = <input type="text" value="20"/> [ft]	Soil Profiles
Source Width <input type="text" value="50"/> [ft]	Slope of Water Table i = <input type="text" value="0.05"/> [-]	Surface Layer <input type="text" value="Loam"/>
Longitudinal Dispersivity <input type="text" value="10"/> [-]	Hydraulic Conductivity Ks = <input type="text" value="3.28"/> [ft/d]	Soil Profile <input type="text" value="P1 - Medium Sand (30m)"/>
Transverse Dispersivity <input type="text" value="1"/> [-]	Groundwater Flux Q = <input type="text" value="3.28"/> [ft2/d]	

Output Charts	
Quantity 1: <input type="text" value="Chloride concentration [g/kg]"/>	Quantity 2: <input type="text" value="Conc. at an Adjacent Well [mg/L]"/>



Max Concentration 379.197 [mg/L] at time 219.704 Year



☐ Legend

☐ Auto-Refresh

Depth to Water		Meters		Feet	95	=	2895.60 cm
User provided moist bulk density (rho_m)		0 kg/m ³	1550 kg/m ³ - Moist bulk density used in calculations				
Dry Bulk Density (rho) =		1415 kg/m ³					
Default Vol. Moist. Content (Theta_v) =		0.135					
Calculated moist bulk density (rho_m) =		1550 kg/m ³					

Trench TT1													
Sample Number (increasing depth)	If a Composite Sample from a Depth Interval						Grab Samples				Z	Chl. Conc.	Chl. Load Depth Int.
	Feet			Meters			z	Depth for sample	z	Depth for sample			
	Top of Sample	Bottom of Sample	Ave. Depth	Top of Sample	Bottom of Sample	Ave. Depth							
1							4	4	0	0	121.92	5644	10.67
2							5	5	0	0	152.4	4848	2.48
3							8	8	0	0	243.84	2440	5.16
4							9	9	0	0	274.32	1016	0.82
5							10	10	0	0	304.8	516	0.36
6							11	11	0	0	335.28	440	0.23
7													0.60
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
Chloride load (kg/m ²)												20.31	

Trench TT2													
Sample Number (increasing depth)	If a Composite Sample from a Depth Interval						Grab Samples				Z	Chl. Conc.	Chl. Load Depth Int.
	Feet			Meters			z	Depth for sample	z	Depth for sample			
	Top of Sample	Bottom of Sample	Ave. Depth	Top of Sample	Bottom of Sample	Ave. Depth							
1							5	5	0	0	Assigned depth in cm	mg/kg	kg/m ²
2							6	6	0	0	152.4	1632	3.86
3											182.88	160	0.42
4													
5													
6													
7													
8													
9													
10													
11													
12													
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21													
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24													
25													
26													
27													
28													
29													
30													
Chloride load (kg/m ²)												4.28	

Trench TT3													
Sample Number (increasing depth)	If a Composite Sample from a Depth Interval						Grab Samples				Z	Chl. Conc.	Chl. Load Depth Int.
	Feet			Meters			z	Depth for sample	z	Depth for sample			
	Top of Sample	Bottom of Sample	Ave. Depth	Top of Sample	Bottom of Sample	Ave. Depth	feet		meters				
1							5	5	0	0	Assigned depth in cm	mg/kg	kg/m ²
2							6	6	0	0	152.4	2440	5.76
3											182.88	59	0.59
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
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21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
Chloride load (kg/m ²)												6.35	

Trench TT4													
Sample Number (increasing depth)	If a Composite Sample from a Depth Interval						Grab Samples				Z	Chl. Conc.	Chl. Load Depth Int.
	Feet			Meters			z		z				
	Top of Sample	Bottom of Sample	Ave. Depth	Top of Sample	Bottom of Sample	Ave. Depth	feet	Depth for sample	meters	Depth for sample	Assigned depth in cm		
1							4	4	0	0	121.92	2440	4.61
2							5	5	0	0	152.4	2440	1.15
3							6	6	0	0	182.88	748	0.75
4							7	7	0	0	213.36	200	0.22
5													0.02
6													
7													
8													
9													
10													
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26													
27													
28													
29													
30													
Chloride load (kg/m ²)												6.76	

	Proportional Area Weights	Chl. Load of each Borehole	Equal Area Weights	Boring Chl. Load times Proport. Of Area
Trench TT1	0.00	20.31	1.00	0.00
Trench TT2	0.00	4.28	1.00	0.00
Trench TT3	0.00	6.35	1.00	0.00
Trench TT4	0.00	6.76	1.00	0.00
	0		4	
Averaged Chloride Load of All Boreholes			9.43	kg/m ²

Appendix H

Regulatory Correspondence

To: Joel Lowry
Subject: RE: nRM2030230289 - Mewbourne's Carlsbad Water Management System - Site Assessment Report and Proposed Remediation Workplan

From: Eads, Cristina, EMNRD <Cristina.Eads@state.nm.us>
Sent: Wednesday, March 17, 2021 10:45 AM
To: Joel Lowry <joel@etechenv.com>
Subject: RE: nRM2030230289 - Mewbourne's Carlsbad Water Management System - Site Assessment Report and Proposed Remediation Workplan

Joel,

The OCD approves of the BLM's proposed variance of using compacted caliche to inhibit the vertical migration of chloride contaminants left in-situ.

Thank you,

Cristina Eads • Environmental Specialist - A
Environmental Bureau
EMNRD - Oil Conservation Division
5200 Oakland Ave, Suite 100 | Albuquerque, NM 87113
505.670.5601 | Cristina.Eads@state.nm.us
<http://www.emnrd.state.nm.us/OCD/>

From: Joel Lowry <joel@etechenv.com>
Sent: Wednesday, March 17, 2021 9:56 AM
To: Eads, Cristina, EMNRD <Cristina.Eads@state.nm.us>
Subject: [EXT] FW: nRM2030230289 - Mewbourne's Carlsbad Water Management System - Site Assessment Report and Proposed Remediation Workplan

From: Joel Lowry
Sent: Monday, February 8, 2021 4:47 PM
To: Eads, Cristina, EMNRD <Cristina.Eads@state.nm.us>; Amos, James <jamos@blm.gov>
Subject: FW: nRM2030230289 - Mewbourne's Carlsbad Water Management System - Site Assessment Report and Proposed Remediation Workplan

Mr. Amos and Ms. Eads,

Please find attached the *Site Assessment Report and Proposed Remediation Workplan* that had been prepared for Mewbourne's Carlsbad Water Management System environmental remediation Site. Also attached is an information packet depicting the present excavation and the location of excavation confirmation soil samples and associated laboratory analytical data.

On November 9, 2020, upon receiving archaeological clearance, Etech conducted an initial release assessment at the Site. During the initial release assessment, a series of test trenches (TT-1 through TT-5) were advanced within the release margins in an effort to determine the vertical extent of chloride impacts. During the advancement of the test trenches, soil samples were collected on approximate 1 Ft increments and field screened for concentrations of chloride. The test trenches were advanced until chloride field test results suggested concentrations of chloride were below 600 mg/kg. Select soil samples were submitted to the laboratory for analysis of chloride. Laboratory analytical results indicated soil was not impacted above 440 mg/kg beyond 11 ft. bgs in the area characterized by test trench TT1, 160 mg/kg beyond 6 ft. bgs in the area characterized by test trench TT2, the laboratory method detection limit beyond 6 ft. bgs in the area characterized by test trench TT3, 200 mg/kg beyond 7 ft. bgs in the area characterized by test trench TT4 and 230 mg/kg beyond 3 ft. bgs in the area characterized by test trench TT5.

Upon conducting the initial release assessment, excavation activities commenced at the Release Site. Impacted soil affected above the NMOCD/BLM Reclamation Standard present within the uppermost 4 Ft. was excavated and transported to an NMOCD-permitted surface waste facility. Excavation sidewalls were advanced until laboratory analytical results indicated chloride concentrations were below the NMOCD Reclamation Standard.

On December 14, 2020, a *Site Assessment Report and Proposed Remediation Workplan*, was submitted to the NMOCD and BLM proposing remediation activities designed to advance the Site toward an approved closure. At the time of preparation, Etech's copies of the available BLM shapefiles suggested the Site was located in an area described as having medium karst potential, considered by some to be unstable. The *Site Assessment Report and Proposed Remediation Workplan*, utilized in-situ chloride contaminant migration models and the *presence of fresh water wells in the vicinity supporting background chloride concentrations of 356 and 340 mg/L* to justify excavation of impacted soil affected above the 10,000 mg/kg present within the release margin.

Due to the size and sensitive nature of the release, upon submitted the *Site Assessment Report and Proposed Remediation Workplan* via the online payment portal, copies were submitted to the BLM and NMOCD for timely consideration. In subsequent conversations between representatives of Etech, the BLM and the NMOCD the *Site Assessment Report and Proposed Remediation* was approved with the condition that a 2-3 Ft. layer of compacted caliche be installed in the base of the excavated area in an effort to mitigate the vertical migration of chloride contaminants left in-situ.

Between November 10, 2020 and January 21, 2021, approximately 21,000 cubic yards of impacted soil has been excavated and transported to an NMOCD-permitted surface waste facility. During the course of remediation activities, 224 excavation confirmation soil samples were collected from the floor of the approximately 90,000 sq. ft. excavation. Laboratory analytical results from excavation confirmation soil samples collected from the floor and sidewalls of the excavated area indicated BTEX and TPH concentrations were below the laboratory method detection limit in each of the analyzed soil sample. Analytical results from excavation confirmation soil samples collected from the sidewalls of the excavated area indicated chloride concentrations were below the NMOCD Reclamation Standard in each of the submitted soil sample. Analytical results from excavation confirmation soil samples collected from the floor of the excavated area indicate the maximum chloride concentration remaining in-situ is 9,000 mg/kg (FL-79 @ 4') and the average chloride concentration is 2,260 mg/kg. Upon receiving verbal approval from both agencies, backfill activities commenced at the Site.

On February 4, 2020, Etech received notification that NMOCD had conducted their formal review of the *Site Assessment Report and Proposed Remediation Workplan* via the online portal and that the workplan was approved with the condition that 600 mg/kg be utilized as the chloride closure criteria on the basis of the Site being located in an unstable area, or with high karst potential. This prompted Etech to check the GIS shapefiles that they had been utilizing. Further review suggests karst designation in the vicinity of the release changed sometime between when the release occurred and the *Site Assessment Report and Proposed Remediation Workplan*, presumably on January 14, 2021, when the shapefile in the zip file on the CFO website was created; all inquiries with industry peers resulted in their current use of the same Karst Shapefile as myself.

Upon receiving NMOCD and BLM approval, Etech proposes to move forward with the original *Site Assessment Report and Proposed Remediation Workplan* and subsequent BLM conditions of approval. The BLM's condition of approval of using compacted caliche would be the proposed variance, or engineering control, designed to inhibit the vertical migration of chloride contaminants left in-situ. The final report will take the shape of a *Remediation Summary and Variance Request* referencing information within the *Site Assessment Report and Proposed Remediation Workplan* and detailing field activities and laboratory analytical results from excavation confirmation soil samples.

Mr. Amos,

If you are still in agreement with the approach might you respond to this email as such?

Ms. Eads,

With Jim's approval might we resume remediation activities and prepare a *Remediation Summary and Variance Request* for consideration at completion?

I apologize for the oversight and inconveniences. Had we known that the area may be considered as having a high potential for karst we would have undoubtedly taken a different route and not started backfilling the excavation on verbal agreements. If you have any questions or need any additional information, please feel free to contact me by phone or email. Thanks.

Joel W. Lowry

Etech Environmental & Safety Solutions, Inc.
3100 Plains Highway
Lovington, NM 88260
Office: (575) 396-2378
Fax: (575) 396-1429
Cell: (432) 466-4450

From: Joel Lowry

Sent: Thursday, December 31, 2020 9:19 AM

To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>

Subject: Holiday? + Quick Call - FW: nRM2030230289 - Mewbourne's Carlsbad Water Management System - Site Assessment Report and Proposed Remediation Workplan

Mike,

I wanted to shoot out an email to see if you were on Vacation this week and if not if you had a quick second to discuss this project. I spoke to Mr. Amos the other day and he was on board. He had requested that during backfilling activities that we do 3 Ft. of compacted fill in lieu of any poly liners. With this, he has just moved away from holding the Medium Karst as Unstable, allowing us to move forward with a 10,000 ppm closure, something the NMOCD may had been on board with all along. It was/is kind of a weird project. Seems the primary approval we needed was from the BLM and we could have safely moved forward "at risk" as it concerns the NMOCD. If you are on vacation, please don't bother. We got an arch survey and a prompt initial response, excavating everything affected above the NMOCD Reclamation Standard present within the uppermost 4 Ft. I bet they are getting close to having moved 15,000 cy by now. We do have an opportunity to advance the floor of the excavation in a couple hot spots to less than 10,000 and begin backfilling the southern portion of the Site to limit our overall footprint and make efficient use of the trucks and mechanical

equipment. Again, if you are on vacation please pay it no mind. Otherwise I hope that you have enjoyed your Holidays and I look forward to working with you again next year!

Respectfully,

Joel Lowry

From: Joel Lowry

Sent: Friday, December 18, 2020 3:45 PM

To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; 'jamos@blm.gov' <jamos@blm.gov>

Subject: FW: nRM2030230289 - Mewbourne's Carlsbad Water Management System - Site Assessment Report and Proposed Remediation Workplan

Mr. Bratcher and Mr. Amos,

Please find attached a *Site Assessment Report and Proposed Remediation Workplan* that has been prepared for Mewbourne's Carlsbad Water Management System reportable release site. On October 19, 2020, a release was discovered on the Carlsbad Water Management System 12-inch poly line. The release was attributed to the failure of a pup joint on the pipeline riser. The initial C-141 indicates that approximately 150 bbls of produced water were released with approximately 20 bbls having been recovered. The release was inferred to have affected an area of ROW and adjacent pasture measuring approximately 85,000 sq. ft. The release site is located in Unit Letters F & K, Section 35, Township 23 South, Range 27 East in Eddy County, New Mexico.

Upon discovering the release and gaining the necessary archeological clearance, remediation activities commenced. Impacted soil affected above the NMOCD Reclamation Standard present within the uppermost 4 Ft. was excavated and transported to an NMOCD-approved disposal facility.

On December 14, 2020, the attached *Site Assessment Report and Proposed Remediation Workplan* was submitted through the NMOCD Online Payment Portal; the release was assigned incident number nRM2030230289.

The release site is in an area identified as Medium Karst (pg 15). The nearest well with depth to groundwater information is an NMOSE well C-03031 located approximately 2,100 Ft southeast of the Site. The driller and completions log indicates water bearing strata was encountered at 139 to 150 Ft bgs. The well was screened from 90 to 150 Ft bgs and had a static water level of 67 Ft. bgs as measured in 2004, which could suggest Artesian (pgs 15, 87, 88). The next closest water well with available information is USGS well located approximate 0.8 Mi north of the Site. The well was completed within alluvium/bolson deposits and exhibited a static water level of 110.98 Ft as measure in 1988 (pg 89). The Site Assessment Report and Proposed Remediation Workplan indicates that the probable depth to groundwater at the Site is approximately 95 Ft. bgs; 90 Ft. bgs was utilized in the chloride migration models within the attached Workplan.

Due to the Site's location and the potential need for chloride migration modeling to develop a proposed remediation strategy a review of available groundwater chemistry data was conducted. The nearest USGS well (32134010409000) with available groundwater chemistry data is located 2.3 Mi south-southeast of the Site. The well is said to have been completed in the Capitan Limestone and exhibited a chloride concentration of 340 mg/L (pgs 95-97). An additional groundwater sample was collected from a public water supply well approximate 1.8 Mi north of the Site. Laboratory analytical results indicates the groundwater sample exhibited a chloride concentration of 356 mg/L and a TDS concentration of 2,050 mg/L (pgs 95, 98-101). The driller and completions log indicates water bearing strata was encountered at 210 to 220 Ft bgs. The well was screened from 160 to 220 Ft bgs and had a static water level of 98 Ft. bgs as measured in 2006, which could suggest Artesian. For the purposes of chloride migration models 350 mg/L was utilized as the background chloride concentration within the aquifer (pg 103).

This is one of the more interesting projects that I have worked on lately. Depth to groundwater is established as being over 50 Ft. bgs. No shallow water bearing zones were identified in the drilling logs for PWS Well #5 or C-03031, which suggests that the first zone of usable freshwater is located at depths ranging from 90 to 220 Ft bgs, which exhibited an average chloride concentration of 348 mg/L.

The Site is located in medium karst which can be considered an unstable area [*sic*]. Laboratory analytical data from soil samples collected from the five (5) vertical test trenches indicates chloride concentrations decline to 440 mg/kg at 11 Ft. bgs in the area characterized by TT1, 160 mg/kg at 6 Ft. bgs in the area characterized by TT2, Non-Detect at 6 Ft. bgs in the area characterized by TT3, Non-Detect at 7 Ft. bgs in the area characterized by TT4 and Non-Detect at 3 Ft. bgs in the area characterized by TT5.

Review of available data suggests that the need for a Variance Request may not be necessary, rather we would need BLM's approval of the attached Workplan, or their permission to utilize Tier II clean-up standards, as opposed to the 600 mg/kg for unstable areas at depths greater than 4 Ft. bgs. Gaining approval from the BLM of the attached Workplan, or them allowing us to proceed as though the Site is not located in an unstable area might limit the chances of the Workplan being denied, the need for a Variance Request and/or the potential need for poly liner(s).

We had a very prompt initial response and approximately 11,000 cy of impacted soil affected above the NMOCD Reclamation Standard has already been excavated and transported to the disposal facility. Due to the size of the release, and in an effort to maintain efficiency and limit the amount of surface disturbance, it would be advantageous for us begin backfilling the southern portion of the release Site. Please review the attached *Workplan* at your convenience. If you have any questions or need any additional information, please feel free to contact me by phone or email. Thanks.

Respectfully,

Joel Lowry

To: Joel Lowry
Subject: RE: [EXTERNAL] FW: nRM2030230289 - Mewbourne's Carlsbad Water Management System - Site Assessment Report and Proposed Remediation Workplan

From: Amos, James A <jamos@blm.gov>
Sent: Thursday, February 11, 2021 4:36 PM
To: Joel Lowry <joel@etechenv.com>
Subject: Re: [EXTERNAL] FW: nRM2030230289 - Mewbourne's Carlsbad Water Management System - Site Assessment Report and Proposed Remediation Workplan

Joel,

For the most part the TT's 1 thru 5 identified where the chlorides clean up, ranging from 3-11' depth with most cleaning up in the 5-7' depth. The current excavations are in the 4' range which will be adequate for the surface restoration, and will keep us from having to excavate an additional 1-3' with the potential for having to lay back sidewalls, etc, causing additional surface disturbance and restoration. The BLM's issues have been achieved, with the removal of the top 4' in order to restore the surface to a condition matching previous conditions and delineation to a point of identifying where the chlorides drop off significantly. With the proposed 3' of compacted caliche overlying the remaining impact. I feel this will create a barrier to deter water penetration and slow the downward migration of chlorides.

With all said, the BLM is okay with the proposed procedure as is. If any questions, please get back to me.
thanks

Incident ID	nRM2030230289
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Robbie RunnelsTitle: Environmental Representative

Signature: _____

Date: 3/22/21email: rrunnels@mewbourne.comTelephone: (575)393-5905

OCD Only

Received by: Robert HamletDate: 8/23/2021

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Robert HamletDate: 8/23/2021Printed Name: Robert HamletTitle: Environmental Specialist - Advanced

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 26090

CONDITIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 26090
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NRM2030230289 CARLSBAD WATER MANAGEMENT SYSTEM, thank you. This closure is approved.	8/23/2021